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Hans Silfverberg: A revision of the genus *Prosmidia* Weise (Coleoptera, Chrysomelidae)

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A REVISION OF THE GENUS PROSMIDIA WEISE (COLEOPTERA, CHRYSOMELIDAE)

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ZOOLOGICAL MUSEUM, HELSINKI

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Abstract

SILVERBERG, HANS (Zool. Mus., Helsinki): A revision of the genus *Prosmidia* Weise (Coleoptera, Chrysomelidae). — Acta Zool. Fennica 139: 1—54. 1973.

The African genus *Prosmidia* Wse. *(Idacantha* auct.), in which the subgenera *Prosmidia* s.str., *Idacanthina* subg.nov. and *Paracanthina* Hincks are recognized, contains 14 species. Diagnoses are given for the genus, the subgenera and the species, with keys and notes on distribution. *Prosmidia sacerdos* n.sp. is described from Cameroon, and *Prosmidia semifasciata* n.sp. from Ethiopia. *Prosmidia chevrolati* Guér. *(Laetiacantha chevrolati* Guér.) and *Prosmidia zavattarii* Lab. *(Laetiacantha zavattarii* Lab.) are transferred to this genus, and *Prosmidia maculosa* Wse. is excluded from it.

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INTRODUCTION

This work,[1] which is part of my planned revision of the entire genus group hitherto known as Idacanthites, deals with some of the most conspicuous African Galerucinae; many of the species are widely distributed and appear to be fairly common. Thus large amounts of material have been available, and in some species I have even been able to evaluate the variation between populations by statistical analysis. The genus *Prosmidia* was described by WEISE (1902), and subsequently split by LABOISSIÈRE (1921) — who called it *Idacantha* Chap. — and here it is treated approximately as it was delimited by LABOISSIÈRE, although more species are included.

In geographic names and administrative divisions I have attempted to follow current use — probably not always succeeding — and when labels have carried the old name I also mention the new.

MATERIAL AND METHODS

The material used for this revision comes from a number of institutions, referred to in the text by the following abbreviations:

BMNH	British Museum (Natural History), London, UK
CAS	California Academy of Sciences, San Francisco, U.S.A.
ISN	Institut Royal des Sciences Naturelles, Brussels, Belgium
LUZ	Lunds Universitet, Zoologiska Inrättningen, Lund, Sweden
MAC	Musée Royal de l'Afrique Central, Tervuren, Belgium
MCG	Museo Civico di Storia Naturalia »Giacomo Doria», Genoa, Italy
MCM	Museo Civico di Storia Naturalia, Milan, Italy
MCT	Museo Civico di Storia Naturalia, Trieste, Italy
MFT	Museum G. Frey, Tutzing, DBR
MNB	Museum für Naturkunde der Humboldt-Universität, Berlin, DDR
MNHN	Museum National d'Histoire Naturelle, Paris, France
MZF	Museo Zoologico della Specola, Florence, Italy
MZH	Museum Zoologicum, Helsingfors, Finland
MZT	Museo ed Instituto di Zoologia Sistematica, Turin, Italy
RMS	Naturhistoriska Riksmuseet, Stockholm, Sweden
SAM	South African Museum (Natural History), Cape Town, South Africa
TMP	Transvaal Museum, Pretoria, South Africa
ZMH	Zoologisches Museum der Universität, Hamburg, DBR
ZMK	Universitetets Zoologiske Museum, Copenhagen, Denmark
ZSM	Zoologische Sammlung des Bayerischen Staates, Munich, DBR

[1]) Contribution to the study of Galerucinae 4.

The male genitalia, when studied, have been made transparent by treatment with a 10 % solution of KOH, and afterwards with clove oil. Where it was necessary to extrude the inner sac, a needle was inserted through the basal orifice, and when the sac emerged through the ostium it was further expanded with a jet of water from a capillary pipette inserted into the penis tube.

When sufficient material was available, a statistical treatment of populations was attempted. For this purpose the elytral dimensions were chosen, because the measurements of total body length would have been affected by differences in the inclination of the head and prothorax. The elytral dimensions measured were the length from base to apex, and the breadth at a distance from the base approximately equal to the breadth of one elytron (fig. 9, b and c). The measurements were made with an eyepiece micrometer at a magnification of × 12, and these values were used for the statistics mentioned.

In the statistical analysis the degree of difference between the populations was studied with the *t* test. In the interpretation of the results, no attempt has been made to assign fixed limits, but each case has been considered independently.

Total length was measured as shown in fig. 9, a+b.

Acknowledgements. A number of colleagues have assisted me in my work by supplying material and information. Their help is gratefully acknowledged:

The late Dr. N. A. Aslam (London), Dr. P. Basilewsky (Tervuren), Mlle Nicole Berti (Paris), Dr. R. Damoiseau (Brussels), Dr. H. Freude (Munich), Dr. A. J. Hesse (Cape Town), Dr. F. Hieke (Berlin), Dr. Sv. G. Larsson (Copenhagen), Dr. H. B. Leech (San Francisco), Dr. C. Leonardi (Milan), Prof. C. H. Lindroth (Lund), Dr. A. Martelli (Florence), Prof. R. Mezzena (Trieste), Dr. T. Nyholm (Stockholm), Dr. R. D. Pope (London), Dr. G. Scherer (Tutzing), Dr. R. Schulze (Pretoria), Dr. R. T. Thompson (London), Dr. E. Tortonese (Genoa), Dr. S. Tuxen (Copenhagen), Prof. H. Weidner (Hamburg), Dr. J. A. Wilcox (Albany, U.S.A.) and Dr. M. Zunino (Turin).

CLASSIFICATION AND DESCRIPTIONS

Genus **Prosmidia** Weise, 1902

Prosmidia Weise 1902:293; Weise 1907b:136; Weise 1915:172; Laboissière 1921:66 (syn. of *Idacantha* Chap.); Weise 1924a:21; Wilcox 1972:289. (Type of the genus: *Aulacophora conifera* Fairm., des. Wilcox 1972).

Diacantha Chevr., Chapuis 1879:17, 18; Allard 1888:317; Jacoby 1903:17; Gahan 1909:218; Laboissière 1921:65 (syn. of *Idacantha* Chap.); Weise 1924a:22 (syn. of *Prosmidia* Wse.). — Not *Diacantha* Chevrolat 1844.

Idacantha Fairm., Chapuis 1875:16. — Not *Idacantha* Fairmaire 1869.

Idacantha Chap., Laboissière 1921:65; Weise 1924a:22 (syn. of *Prosmidia* Wse.); Hincks 1949:612 (syn. of *Prosmidia* Wse.). — Not *Idacantha* Fairmaire 1869.

Paracantha Laboissière 1921:71; Hincks 1949:619 (syn. of *Paracanthina* Hincks). (Type of the genus: *Idacantha multicolor* Wse.). — Not *Paracantha* Coquillet 1899.

Paracanthina Hincks 1949:619 (replacement name for *Paracantha* nom.praeocc.); Wilcox 1972:295. Subgenus.

The body is generally large and robustly built (length 6.5—12.0 mm, breadth 3.2—5.7 mm), usually broadest a little before the end.

The head is exserted and narrower than the prothorax; the vertex is smooth. The eyes are medium-sized and strongly convex; between the eyes, behind the antennal sockets, there is on each side a transverse callus; these structures meet in the midline, in front of them, between the antennal sockets there is a distinct ridge. The labrum is about twice as broad as long, its anterior margin being concave medially. The antennae, inserted between the eyes, are long and slender, reaching to about 2/3rds of the length of the elytra; the segments are subcylindrical, usually widening slightly towards the apex; the segments 3—11 are about × 4 as long as broad, densely pubescent and carrying some longer setae, especially at the apex.

The pronotum is about × 1 1/2 broad as long, broadest somewhat behind the anterior corners, and always narrower than the base of the elytra. On the disc there is a transverse depression, which is very distinct at the sides, but usually weaker or obliterated in the middle. The lateral margins are strongly bordered; the bordering continues along the hind margin, which may be bordered all the way, or only laterally. The hind margin of the male is modified in various ways. Each of the four corners carries a fine seta.

The scutellum in the male is long and slender, or triangular, in the female triangular.

The elytra are almost parallel-sided, widened slightly in the hind part, or evenly widened from the base to about 2/3rds of the length; the apex is rounded or slightly concave; the punctuation varies from fine to coarse. In the male the basal area is modified, in some species only slightly convex, in others strongly elevated, or bearing tubercles.

The underside is thinly — rather densely covered with fine hairs. The epipleura are abbreviated and do not continue beyond the middle. The last visible abdominal segment of the male is trilobate; that of the female is evenly rounded or with a slight concavity at the apex.

The legs are fairly long; the femora are weakly pubescent, the tibiae and tarsi more strongly so, the hairs on the tibia becoming bristly towards the apex; the apical spur is shorter than the breadth of the tibia. The 1st tarsal segment is about as long as the 2nd + 3rd, the claws are bifid.

Male genitalia: The penis is robust, reaching about 1/3rd of the body length. The tegmen consists of two ventrally fused rods, which extend half-way round the penis; in addition there is an apodeme of similar shape. The penis consists of a moderately broad tube with a large basal orifice and a fairly large ostium; the basal orifice opens ventrally, the ostium dorsally. The internal sac carries a number of sclerites, the shape of which can be of taxonomic importance; in addition there are usually restricted areas carrying dense aggregations of microspicules. The sclerites can be grouped into three categories: hooks near the ostium, spicules somewhat more apicad, and still more apicad a more or less curved spine, in which a canal can be seen. When the internal sac is within the penis tube, the spicules can be seen laterally on the left side and the spine near the base, somewhat on the right side. The internal sac shows a tendency towards division into lobes.

The correct name of this genus has been a matter of controversy, but since Hincks (1949) fixed *Galeruca unifasciata* Ol. as the type species of the genus *Diacantha* Chevr., the case should be regarded as closed. In that same work the earlier designations of *Aulacophora bispinosa* F. (by Jacoby 1903) and *Diacantha dregei* Dej. — in itself an invalid name — (by Gahan 1909) were shown to be invalid. The name *Idacantha* Chap. is simply a junior homonym of *Idacantha* Fairm., which is a replacement name for *Diacantha* Chevr., and thus carries the type designated by Hincks.

The status of the name *Idacantha* Chap. makes it necessary to change the name of the

genus group also, if such a category is to be used (International Code of Zoological Nomenclature, Article 39). Therefore the name Idacanthites (LABOISSIÈRE 1921:63) is hereby replaced by Prosmidiites.

The genus *Prosmidia* can be divided into three subgenera.

Key to the subgenera of *Prosmidia*

1 Pronotum of ♂ with a sharp, oblique ridge at base on each side of midline. Abdomen yellowish, underside of thorax black ..... *Prosmidia* s.str.
— Pronotum of ♂ without such ridges. Abdomen black, or entire underside yellowish..2
2 Elytral punctuation rather fine, usually shallow, distance between punctures at least equal to diameter, usually larger; pronotal impression often weak or obliterated medially ..... *Idacanthina* subg.nov.
— Elytral punctuation conspicuously coarse, strongly impressed, distance between punctures much smaller than their diameter; pronotal impression distinct in both sexes and rather deep medially ..... *Paracanthina* Hincks

Subgenus **Prosmidia** s.str.

The pronotum has a strongly convex disc, especially in the male; the ♂ hind margin is drawn out into a blunt, backwardly directed process at a level with the disc, with a sharp oblique ridge on each side. In the female the hind margin is bordered; the bordering may tend to disappear medially, where the disc shows a slight depression.

The scutellum in the male is long and slender, with a somewhat rounded apex. The elytra are broad, their base in the male with a sharp, conical tubercle on each side of the scutellum; the scutellar area strongly concave, falling steeply from the tubercle; the elytral punctuation is much weaker in the basal area of the male than elsewhere.

Male genitalia: The internal sac of the penis is trilobate, the shortest lobe bearing the short curved spine. Each of the two longer lobes carries a sublobe with densely aggregated setae. There are no ostial hooks.

Key to the species of the subgenus *Prosmidia* s.str.

1 Posterior half of elytra uniformly black ..... *P. conifera* (Fairm.)
— Posterior half of elytra largely reddish — brownish; only margins and suture, and an oblique band at middle of elytra black ..... *P. bispinosa (F.)*

Prosmidia conifera (Fairmaire), 1882

Figs. 6, 10, 22A.

Aulacophora conifera FAIRMAIRE 1882:56. Type, lectotype by present designation: ♂, Zanguebar, coll. Fairmaire, MNHN).
Diacantha conifera (Fairm.), PÉRINGUEY 1892a:89; GAHAN 1893:746; JACOBY 1898:356.
Prosmidia conifera (Fairm.), WEISE 1902:295; WEISE 1924a:22; WILCOX 1972:289.
Idacantha conifera (Fairm.), WEISE 1909:195; WEISE 1914:262; LABOISSIÈRE 1921:66; LABOISSIÈRE 1925:40; LABOISSIÈRE 1925b:95; LABOISSIÈRE 1931:9; BRYANT 1959:220; FERREIRA 1963:457.

Yellowish — reddish, underside of meso- and metathorax and legs black, antennae black, with 1st and 2nd segments, and usually base and sometimes a large part of

underside of remaining segments yellow — red. Apical half of elytra black, anterior margin of black area undulating. Very rarely the black area is expanded (see Variation).

Pronotum strongly convex; transverse depression very weak even laterally in the male, laterally distinct but almost obliterated medially in the female.

Elytra shining, punctuation moderately dense; punctures shallow but distinct. Microsculpture distinct but weak, forming an isodiametric mesh. Elytra sometimes with very faint longitudinal furrows, visible in light from the side.

Male genitalia: Penis rounded at apex. Inner sac turning to the left when extruded in all specimens studied, with dense setae near the base.

Length (6.8—) 7.7—10.7 mm, breadth (3.2—) 3.6—5.2 mm.

Types. FAIRMAIRE (1882) did not mention the number of specimens on which his description of the species was based, and for locality the only information was that the species was collected between Zanzibar and the great lakes. Itn MNHN there are four specimens labelled »Ex Musaeo L. Fairmaire», one of which carries a label in Fairmaire's writing, with the text »*Aulacoph. conigera* Fairm. Zanguebar». This specimen I designate the lectotype, and have labelled it accordingly.

Distribution. From southern Kenya to SE Zaire, southern Angola, Namibia, Botswana, Transvaal and Natal. (Fig. 1).

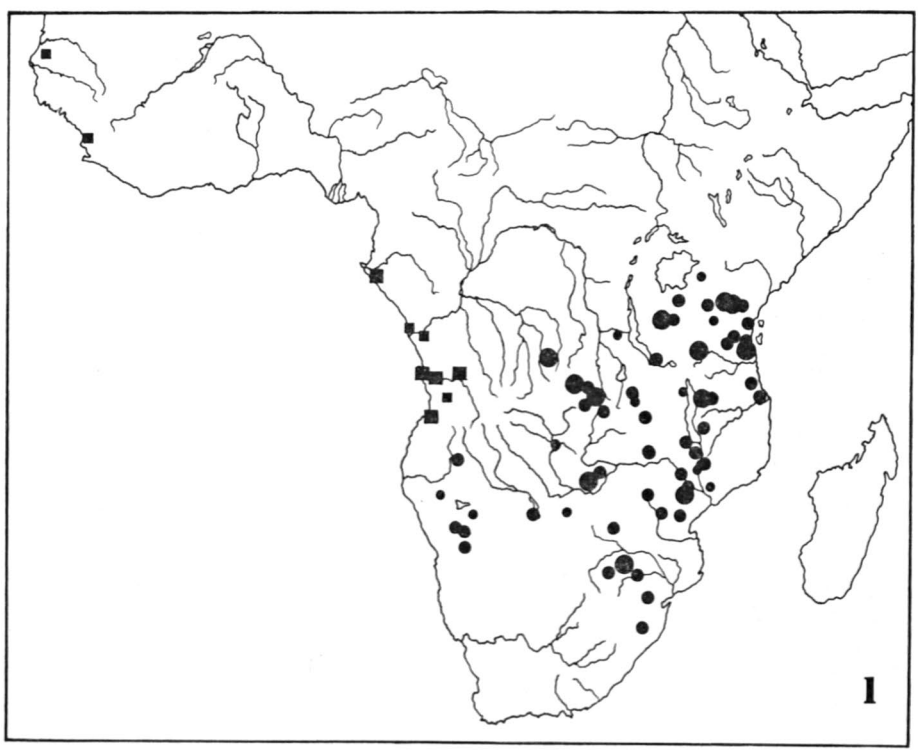

FIG. 1. Distribution of *Prosmidia conifera* (●) and *P. bispinosa* (■).

Specimens examined:

Kenya

Nyanza. Amala River, Sotik (B.E.A.) Janv. 1913, G. Babault, 1 ex. (MNHN).

Rift Valley. Kilimanjaro, Sjöstedt, Leitokitok, 1 ex. (RMS).

Coast. Taveta, Alluaud & Jeannel, Mars 1912, St. 65, 750 m, 9 exx. (MNHN); Bura (Wa-Taita) Alluaud & Jeannel, Mars 1912, St. 61, 1050 m, 1 ex. (MNHN); Voi, Alluaud & Jeannel, Mars 1912, St. 60, 600 m, 4 exx. (MNHN).

Tanzania

Tanga. Usambara, Studt G., 1 ex. (MNB), Usambara, Nguelo, coll. Brancsik, 2 exx. (MFT), Usambara, Götzelmann, 4 exx. (ZMK), Usambara, 1 ex. (BMNH); Magamba-Bge b. Masinde, 5.I.06, 700—1600 m, C. Schröder, 1 ex. (MNB); Mombo, 8.04. Vosseler G., 10 exx. (MNB), Usambara, Mombo, Ch. Alluaud, IV.1909, 2 exx. (MNHN); Tanga, Ende IV.93, O. Neumann S., 1 ex. (MNB); Tanga, März 1916, leg. Methner, 1 ex. (MNB); Korogwe, Mitte V.93, O. Neumann S., 2 exx. (MNB); Magila bis Korogwe, Anf. V.93, O. Neumann S., 1 ex. (MNB); Mgera (N. Ngun) 31.V.—3.VI.93, O. Neumann S., 1 ex. (MNB); Msamwia, II.09, Fromm S. G., 9 exx. (MNB); Amani 25.—30.12.06, Vosseler G., 1 ex. (MNB); Hale, 3.08, Vosseler G., 3 exx. (MNB); Usagara, 1 ex. (MNB); Uzagara, coll. Pic, 4 exx. (MNHN); Kikogwe, IV.04, 1 ex. (MNB); Ukawende — Ukonongo, Dec. 13, leg. Zencke, 5 exx. (MNB); Luiba, 4 exx. (MNB).

Kilimanjaro. Kilimandjaro, Schira, Dr. E. H. Forster G., 3 exx. (MNB), Kilimandscharo, Moschi, 1150 m, Widenmann S., 9 exx. (MNB), Kilimandjaro versant Sud-Est, Neu-Moschi, 800 m, Alluaud & Jeannel, Avril 1912, St. 72, 15 exx. (MNHN); Moschi, Merker S., 2 exx. (MNB), Moschi-Umg. 7.39, Ostafr. Exp. 1939, E. v. Saalfeld, 1 ex. (ZSM); Pare 2000 m, Chr. Schröder, 4 exx. (MNB).

Arusha. Ufiome, 6 exx. (ZSM, RMS); Massaisteppe, Chr. Schröder, 2 exx. (MNB); Umbugwe, Kohlschütter, 2 exx. (MNB).

Shinyanga. Old Shinyanga, 17.II.1954, E. Brutt, 2 exx. (BMNH).

Coast. W. Ukami, Stuhlmann S., 1 ex. (MNB); Kidugala, I.1903, Schröter S. G., 11 exx. (MNB), ibid. 5.XII.1903, 16 exx. (MNB).

Morogoro. Mhondo — Ouzigoua, A. Hacquard, 4 exx. (MNHN); Usegua, Rufu-Fl., 21—25.IV.1900, Glauding S., 5 exx. (MNB); Mkatta, R. Schoenheit S. G., 1 ex. (MNB); Mrogoro, R. P. Gommerginger, 1 ex. (MNHN); Morogoro, J. N. Ertl, 1 ex. (ZSM).

Dodoma. Kondoa, Bloyet 1885, 42 exx. (MNHN); Bzk. Usandwi, XII.29, H. Fliegner S. G., 3 exx. (MNB).

Iringa. Uhehe, Iringa, E. Nigmann S. G., 12 exx. (MNB); Uhehe — Iringa, Götze S., 1 ex. (MNB); Uhehe, Dabanga, E. Nigmann S. G., 2 exx. (MNB); Südl. Uhehe, Iringa — Mgololo, III.99, Götze S., 5 exx. (MNB); Iringa, J. N. Ertl, 4 exx. (ZSM); Luisva, 1905, J. N. Ertl, 3 exx (ZSM); Tosamaganga, J. N. Ertl, 2 exx. (ZSM).

Singida. Ugogo, v. Beringer & Jost S. G., 6 exx. (MNB); Kilimatinde, 12.04, Trefurth S., 1 ex. (MNB).

Tabora. Tabora, Ounyanyembe, R. P. Hauttecoeur, 1er Trim. 1885, 4 exx. (MNHN); Tabora, Kilimatinde — Ituri, 1.05. Trefurth S., 1 ex. (MNB); Mwazie, Casanga 916, 1 ex. (MCM); Kassanga, 1.2.1899, Wedter S. G., 2 exx. (MNB); Urambo, coll. Oberthur, 17 exx. (MNHN); Tanganyika-See, Böhm S., 2 exx. (MNB).

Mbeya. N. Nyassa-See, Konde — Unyika, I.00, Fülleborn S., 14 exx. (MNB).

Ruvuma. Kigonsera, J. N. Ertl, 32 exx. (ZSM, MAC); Kigonsera, C. Hartl, 29 exx. (ZSM, MFT); Kigonsera, Höfliger S. G., 21 exx. (MNB); Peramibo, J. N. Ertl, 4 exx. (ZSM); Peramibo, C. Hartl, 1 ex. (MFT); Ungoni, Stierling S., 2 exx. (MNB); Songea, XII.12, 3 exx. (MNB).

Mtwara. Lindi — Masasi, 14.IV.97, Fülleborn S., 1 ex. (MNB); Lindi, II — 8.IV.97, Fülleborn S., 4 exx. (MNB); Mikindani, Claus Schilling S., 4 exx. (MNB); Mikindani, IV—V.1911, H. Grote S. G., 1 ex. (MNB)

Zanguebar, coll. Oberthur, 4 exx. (MNHN); Zanguebar, Ex Musæo L. Fairmaire, 1 ex. lectotype (MNHN); Zanguebar, R. P. Leroy, 1 ex. (MNHN); Deutsch O. Afr., 5 exx. (MNHN); E. Africa, 96—83, 4 exx. (BMNH).

Zaire

Shaba. Kolwezi, Mme L. Gilbert, 35 exx. (MAC), Kolwezi, A. Franc, 3 exx. (MAC);

35 mi E. of Kolwezi, I—29—58, 1500 m, E. E. Ross & R. E. Leech, 1 ex. (CAS); Kakanda (Mutaka), Th. de Caters, 6 exx. (MAC); Jadotville (= Likasi) IX/X 1945, P. Gravez, 2 exx. (MAC); Jadotville 2 exx. (ISN); Jadotville: Mwera, Th. de Caters, 2 exx. (MAC); Lubudi, R. Clair, 2 exx. (MAC); Elisabethville (= Lubumbashi), A la lumière, Ch. Seydel, 5 exx. (MAC), Elisabethville, M. Lips, 2 exx. (MAC), Airport Elisabethville, 1350 m, I—26—58, E. S. Ross & R. E. Leech, 1 ex. (CAS); 18 m S.W. of Elisabethville, Dr. H. S. Evans, 7 exx. (BMNH); Région de M'Pala, R. P. Guillemé, 13 exx. (MNHN); Région du Tanganika, R. P. Depaillat, 1900, 28 exx. (MNHN); Katanga-sud, J. Neynens, 17 exx. (ISN).

Kasai oriental. Mwene-Ditu, Doutrelepont, 14 exx. (MAC).

Zambia

Northern. N. of Lake Bangweulu, N'Sombo, 11.XII.1946, M. Steele, 3 exx. (BMNH); Lake Bangweulu, Chiluwi Island, 26.XI.1946, M. Steele, 1 ex. (BMNH); Ubemba, R. P. Guillemé, 6 exx. (MNHN).

Copperbelt. Chingola District, Oct.—Nov. 1960, L. J. Magie, 3 exx. (BMNH); Luanshya, Dec. 1944, H. Lougher, 2 exx. (TMP).

Central. Serenje Distr. 20.12.-07, about 4500 feet, Neave Coll., 2 exx. (BMNH); Broken Hill (=Kabwe), Paula Timm leg., 6 exx. (ZMH).

North-Western. Kasempa, 8—12—1959, P. Johnson, 1 ex. (ZMK).

Western. Haut-Zambèze, Léalui, V. Ellenberger, 1919, 1 ex. (MNHN).

Southern. Nama-ula, 22.III.1913, H. C. Dollman, Pumpkin leaves, 2 exx. (BMNH); Monze, Chikuni Mission, XI—XII.1929, Prof. L. Cipriani, 3 exx. (MZF); Valle de Kafue, Mazabuka, Marzo 1930, Prof. L. Cipriani, 21 exx. (MZF); Caloma, V—1950, 1 ex. (MZF); Pemba, 1917, Father Casse, 1 ex. (SAM).

N. Rhodesia, 1 ex. (MFT).

Malawi

Northern. Ngara to Dowa Road, Jan. 1911, Dr. J. E. S. Old, 1 ex. (BMNH).

Central. Milengeni to Nchen, Jan.1911, Dr. J. E. S. Old, 1 ex. (BMNH); Angoniland, S. O. Nyassa, R. P. Guillemé, 3 exx. (MNHN).

Southern. Lower Shire District, April—May 1911, Dr. J. E. S. Old, 1 ex. (BMNH); Chiromo, elev. 100 m, II—26—58, E. S. Ross & R. E. Leech, 3 exx. (CAS); S.W. of Lake Chilwa, 9. Jan. 1914, S. A. Neave, 2 exx. (BMNH); Zomba, 4 exx. (BMNH).

L. Nyasa, Baly Coll., 1 ex. (BMNH); Nyasaland 96—11, 3 exx. (BMNH).

Mozambique

Niassa. Mozamb. Nyassa, Simons, Fry Coll., 1 ex. (BMNH); Mozamb. Nyassa, Thelwall, Fry Coll., 1 ex. (BMNH).

Zambesia. Borama, coll. Brancsik, 1 ex. (MFT); mittl. Sambesi, W. Tiesler S. G., 7 exx. (MNB); Mozamb. Zambesi, Bradshaw, Fry Coll. (BMNH).

Tete. Tete, K. Wiese S. G., 8 exx. (MNB).

Manica e Sofala. Inhacoro près Chemba, R. Thénot, 1936, 4 exx. (MNHN); Vallée du Pungoué, Guengère, G. Vasse 1906, 2 exx. (MNHN); Vallée du Revoué, Env. d'Andrada, G. Vasse 1905, 3 exx. (MNHN); Haut Sangadze, Canxixe, P. Lesne 1929, 21 Janvier, 12 exx. (MNHN).

Port O. Afr., M. Pueji, 4 exx. (MNB); Mozambique, Tavares G., 5 exx. (MNB).

Rhodesia

Mashonaland South. Salisbury, Dec. 97, 1 ex. (BMNH), Salisbury, Jan. 98, 1 ex (BMNH), Salisbury, Feb. 98, 1 ex. (BMNH), Salisbury, Feb. 1906, G. A. K. Marshall, 3 exx. (BMNH), Salisbury, Dr. Melle Arcturus, 1916, 1 ex. (SAM); Hillside, 30.1.1923, Swinburne & Stevenson, 5 exx. (TMP).

Manicaland. Umtali, 2 exx. (SAM).

Matabeleland. Bulawayo, F. Brooks, 1902, 1 ex. (BMNH), Bulawayo, 1.1923, R Stevenson, 1 ex. (TMP); West Nicholson, Masase, 1934, coll. Johannes Bergman, 1 ex. (LUZ); Matabele, Hård af Segerstad, 2 exx. (RMS).

Rhodesia, Böttcher, 4 exx. (MNB, ISN); Taukei Game Reserve, Febr. 1951, G. M Piper, 1 ex. (ZSM).

Angola
Huila. Capelongo — Dongo, Mission Rohan-Chabot, 1914 Decembre, 1 ex. (MNHN); Capelongo pres Luceque, Haut Cunene, Mission Rohan-Chabot, 1914, Decembre, 1 ex. (MNHN).

South Africa
Transvaal. Waterberg Dist., 1898—99, v. Jutrzencka, 3 exx. (TMP); Shilouoane pres Leydsdorp, H. A. Junod, 1906—07, 15 exx. (MNHN); Barbertown, 2 exx. (MNHN); Rustenburg, Distant Coll., 1 ex. (BMNH); Ha Tschakoma, Miss. Wessman S., 9 exx. (MNB); Zoutpansberg, Mp'hôme, Magd. Knothe, 31 exx. (MNB); Mokeetse, 1.III.1922, Streeter, 3 exx. (TMP); Masilicatz, Dupont 1845, 1 ex. (MNHN).
Natal. Port Natal, Mus. Westerman, 1 ex. (ZMK); Natal, Ex Musæo Mniszech, 1 ex. (MNHN); Natal, 30733, 1 ex. (MNB).
South Africa 1903, 3 exx. (MNHN); S. Africa 86.14, 2 exx. (BMNH); Caffraria, J. Wahlberg, 3 exx. (RMS), Caffraria, Tarnier, 1 ex. (RMS); Caffraria, 1 ex. (ISN).

Botswana
L. Ngami, 67—56, 3 exx. (BMNH); Js B. Spei, L. Ngami 24020, Fry Coll., 2 exx. (BMNH); Penda-ma-Tenka, E. Holub, 1 ex. (MNHN).

Namibia (South West Africa)
Otavifontein, 20.XI.1933, K. Jordan, 1 ex. (BMNH); Abachaus, Otjivarongo, XII. 1949, G. Hobohm, 8 exx. (ZSM, TMP); Abachaus, Damaraland, XII.1951, G. Hobohm, 1 ex. (TMP); Damara, De Wulder, 3 exx. (RMS); Okahandya, Casper S. G., 3 exx. (MNB); Outyo, Langheld S., 1 ex. (MNB); Ovampo L., Eriksson, 1890—91, 1 ex. (SAM).

Variation. Over most of its range *P. conifera* specimens vary very little in colour, only two or three specimens having the black colour replaced by brown. In Namibia and western Botswana, however, quite a different colour form is found. Of the 19 specimens from Namibia 5 had the elytra black except for a rounded area at the base (fig. 10), and 2 of the 5 specimens from Ngami, Botswana had this coloration.

Samples from different areas were also analysed for size variation. The areas were Tanzania, Katanga (= Shaba), Transvaal and Namibia (+ Ngami). When the amount of material was very large, 30 specimens was considered a convenient number. The results are given in table 1.

The analysis shows that in size, too, the specimens from most parts of the range are quite similar. For the Namibian population no significant differences in size were found, but this may have been due to the small number of specimens available. In view of the considerable proportion of darkened specimens, and the smaller mean size, this population

TABLE 1. Size variation in *P. conifera* populations.

			length		breadth		*t* test (length upper right, breadth lower left)			
		n	$\bar{x}$	s	$\bar{x}$	s	Tz	K	Tv	N
♂♂	Tanzania	30	92.0	7.6	56.3	5.8	—	1.9	1.8	2.1
	Katanga	30	88.1	8.1	54.8	4.7	0.8	—	0.5	0.9
	Transvaal	30	89.0	5.2	54.2	4.0	1.6	0.5	—	1.3
	Namibia	10	85.1	9.4	51.7	6.5	2.1	1.5	1.2	—
♀♀	Tanzania	30	90.3	8.7	56.6	5.8	—	0.8	0.4	1.8
	Katanga	30	88.6	7.5	55.6	4.8	0.7	—	0.2	1.2
	Transvaal	30	89.4	7.1	55.3	6.1	0.8	0.2	—	1.5
	Namibia	9	85.8	5.9	53.7	4.8	1.5	1.0	0.8	—

might be given subspecific rank, but until more material has been studied, I prefer to refrain from such action.

The highly uniform appearance of the specimens from most parts of the area suggests that this species has enlarged its range comparatively recently. The nucleus of this dispersal may have been somewhere in the present Zambia, or thereabouts. However, these comments are purely speculative, and the matter is open for discussion.

Prosmidia bispinosa (Fabricius), 1798

Figs. 11, 22 B.

Crioceris 2spinosa Fabricius 1798:89; Zimsen 1964:101. (Type: ♂, Africa, coll. Fabricius, ZMK).
Crioceris 2-spinosa Fabricius 1799:18.
Crioceris bispinosa Fabricius 1801:449; Coquebert 1804:123, Tab. XXVIII, 4.
Galeruca bispinosa (F.), Olivier 1808:648, Pl. 4, 59.
Aulacophora bispinosa (F.), Harold 1879:211; Jacoby 1891:40.
Diacantha bispinosa (F.), Allard 1888:318, 323; Jacoby 1903:17.
Prosmidia bispinosa (F.), Weise 1902:295; Weise 1924a:22; Ferreira 1967:884; Wilcox 1972:289.
Idacantha bispinosa (F.), Laboissière 1925a:40.
Diacantha spinosa (Ol.), D'Orbigny 1844:718 (error for *bispinosa* F.).
Diacantha (?) *fenestrata* Karsch 1882:399. (Type ♀, Chinchoxo, Falkenstein, MNB).
Diacantha fenestrata Karsch, Allard 1888:323 (syn. of *bispinosa* F.).
Prosmidia fenestrata (Karsch), Weise 1902:295; Weise 1924a:22; Wilcox 1972:290.
Idacantha bispinosa (F.), Laboissière 1925a:40.

Yellowish — brownish red, underside of meso- and metathorax, and legs black. Elytra black along suture and in apical half along margin and with an oblique transverse band, the sutural end of which is more anterior.

Pronotum not so strongly convex as in *P. conifera;* transverse impression stronger, in some cases observable in the ♀ medially.

Elytral punctuation and microsculpture much as in the preceding species.

Male genitalia resembling those of *P. conifera* when the internal sac is retracted, but when extruded this turns to the right, with the dense setae near the apex of the lobes. Spicules also somewhat shorter.

Length 7.5—9.5 mm, breadth 3.6—5.0 mm.

Types. The type of *Crioceris bispinosa* has already been discussed by Zimsen (1964). The type of *Diacantha fenestrata,* the description of which Karsch (1882) based on a single specimen, is in MNB. The specimen is a female, and carries one label saying »*fenestrata* Karsch», another »Chinchoxo, Falkenstn.», and a third with the number 61208. I have provided it with a holotype label in addition.

Distribution. From Angola to Gabon, also Sierra Leone and Senegal (Fig. 1). The existence of specimens from Sierra Leone and Senegal (one from each) is quite surprising, as none have been reported from the area between Sierra Leone and Gabon. Yet, since there are two specimens from the West, it can hardly be a case of incorrect labelling.

Specimens examined:

Senegal
Senegal, coll. Brancsik, 1 ex. (MFT).

Sierra Leone
Sierra Leone, Coll. Chevrolat, 1 ex. (BMNH).

Gabon
Gabon, 2 exx. (ISN).

Zaire
Congo, 1 ex. (ISN).

Angola
Cabinda, Chinchoxo, Falkenstein, 1 ex., *Diacantha fenestrata* type (MNB).
Luanda. Loanda, Coll. Fairmaire, 2 exx. (MNHN); Loanda, coll. Pic, 4 exx. (MNHN); Loanda, coll. Allard, 1 ex. (MNHN); St. Paul de Loanda, Ex Musæo L. Fairmaire, 1 ex. (MNHN).
Cuanza Norte. Dondo, Homeyer, 2 exx. (MNB).
Malanje. Malange, Schütt, 3 exx. (MNB).
Cuanza Sul. Phota, Baly Coll., 1 ex. (BMNH).
Benguela. Benguela, Coll. de Bonvoulair, 1 ex. (MNHN); Benguela, Ex Musæo Mniszech, 1 ex. (MNHN); Benguela, coll. Chevrolat, 1 ex. (BMNH); Benguela, Baly Coll., 3 exx. (BMNH); Benguela, 2 exx. (ISN).
Angola, Ex Mus. Murray, 4 exx. (BMNH); Angola, 76.28, 6 exx. (BMNH).

Africa, coll. Fabricius, 1 ex., *Crioceris bispinosa* type (ZMK); Afric. austr. Ex Musæo L. Fairmaire, 1 ex. (MNHN); Port Natal (!) Baly coll., 1 ex. (BMNH).

Variation. The small amount of material available does not permit a statistical analysis. The coloration does not seem to vary much.

Subgenus **Idacanthina** subg.nov.

This subgenus is not very easily distinguished by external characters, which show considerable variation between the species groups, but, all the same, the remarkable uniformity of the ♂ genitalia makes it appear to me a natural unit.

The pronotum not so strongly convex, especially in the female, but in some species the male also has a very distinct transverse depression; in this respect there is considerable variation. Scutellum in the male long and slender, or triangular. The elytra in most species are somewhat narrower than in the nominate subgenus, the basal and scutellar areas in the male are more or less distinctly modified (see the species groups), and the elytral punctuation is much weaker in the basal area than elsewhere in the male (sometimes a bit weaker in the female, too).

Male genitalia: The internal sac of the penis has one main lobe, and two smaller ones; one of these side-lobes tapers, one margin being densely microspiculate, the other one carries the rather long curved spine. At the ostium there is one long, curved hook, and two small, circular ones.

Type of the subgenus: *Prosmidia suahelorum* Wse.

Key to the species of subgenus *Idacanthina*

Males

1 Elytra at base with a ± sharp protuberance, or a forwardly directed tubercle, or, if this is indistinct, with pronotum distinctly elevated medially 2
— Elevation at base of elytra rounded, gently sloping; pronotum not elevated medially. Elytra dark with broad, light borders ..... *P. marginata* Silfv.
2 Pronotum without a conspicuous broad border, secondary sexual characters (processes, depressions etc.) distinct 3

— Pronotum with a conspicuous broad border, secondary sexual characters weak. Elytra dark, along suture and margin very narrowly lighter; basal tubercle light .... *P. prasina* Silfv.
3 Hind margin of pronotum with a distinct backwardly directed process 4
— Hind margin of pronotum with at most two closely situated tubercles that do not extend backwards more than 1/3rd of their width 8
4 Process on hind margin of pronotum forming an elevated knob *(dregei* group) .. 5
— Process on level with disc of pronotum ..... *P. suahelorum* Wse.
5 Elytra yellowish, each with 5 rounded black spots ..... *P. decemmaculata* (Lab.)
— Elytral markings not consisting of 5 rounded black spots on each side 6
6 Elytra with basal half entirely light, or with isolated dark spots, or, if the spots form an interrupted transverse band, each elytron with a large, rounded isolated dark spot at apex; seldom almost the entire elytron is black, with some yellowish colour at the very base (fig. 12—15); elytral punctuation fine ..... *P. dregei* (Chap.)
— Elytra with a transverse band on basal half, which may be interrupted, even so that only a marginal spot remains; no isolated rounded dark spot at apex. Area of dark colour may be enlarged, only isolated lighter spots remaining on shoulder and apex; shoulder spot then angular (figs. 16—17) 7
7 Apex of elytra dark; elytral punctuation fine ..... *P. sexplagiata* (Jac.)
— Apex of elytra light; elytral punctuation coarser ..... *P. sacerdos* n.sp.
8 Pronotum near its hind margin with a kidney-shaped excavation .. *P. excavata* (Wse.)
— Pronotum without any cavity ..... *(chevrolati* group) 9
9 Pronotum uniformly light or with two small black spots 10
— Pronotum black, with or without light spots ..... *P. zavattarii* (Lab.)
10 Narrower species (4.0—4.6 mm broad) with tongue-shaped scutellum .... *P. chevrolati* (Guèr.)
— Broader species (5.5 mm broad) with triangular scutellum ..... *P. semifasciata* n.sp.

Females

1 Elytra dark with broad light margins ..... *P. marginata* Silfv.
— Elytra not dark with broad light margins 2
2 Pronotum light, sometimes with dark spots 3
— Pronotum black, with or without reddish spots ..... *P. zavattarii* (Lab.)
3 Elytra yellowish with 5 rounded black spots on each ..... *P. decemmaculata* (Lab.)
— Elytral markings not consisting of 5 rounded black spots 4
4 Elytra with a black transverse band (sometimes two), which may be interrupted, but then with dark colour along suture also; or with the whole apical half or even more dark (dubious specimens to be found under both entries) 5
— Elytra uniformly light, or with small isolated black spots, or black along the suture or side margin, or both 9
5 Elytra with basal half entirely light, or with isolated spots, or, if the spots form an interrupted transverse band, with a large, rounded, isolated dark spot at apex; seldom almost the entire elytron is black, with some yellowish coloration at the very base (figs. 12—15, 19) 6
— Elytra with a transverse band on basal half, sometimes interrupted, or even reduced to a marginal spot; no isolated rounded dark spot at apex. Area of dark colour may be enlarged, only isolated spots remaining at shoulder and apex; shoulder spot then angular (figs. 16—17) 8

6 Elytra finely punctuated, with distinct (at × 25 magnification) microsculpture, forming a ± isodiametric mesh 7

— Elytral punctuation coarser, microsculpture indistinct (at × 25 magnification) .... *P. suahelorum* Wse.

7 Colour variable; elytra rarely in apical half with a large yellowish spot, enclosed by black, and black colour forming a pointed extension along the suture (figs. 12—15). Larger on average (8.3—12.1 mm). (Some individual females may be indistinguishable from *P. excavata)* ..... *P. dregei* (Chap.)

— Black colour of elytra enclosing a large, yellowish spot in the apical half, and reaching forwards along the suture as a pointed extension; usually also small black spots on basal half (fig. 19 E, G). Average size smaller (6.5—9.3 mm) .... *P. excavata* (Wse.)

8 Apex of elytra dark; elytral punctuation fine ..... *P.sexplagiata* (Jac.)

— Apex of elytra light; elytral punctuation coarser ..... *P. sacerdos* n.sp.

9 Elytra blackish along both suture and side margin, or neither 10

— Elytra light along suture, blackish along side margin (in apical half), with or without small dorsal black spot ..... *P. chevrolati* (Guèr.)

10 Elytra without spots, with or without blackening along side margin and suture .... *P. dregei* (Chap.), var.

— Elytra with small black spots on basal half 11

11 Elytra with a ± irregular-shaped marginal spot on basal half extending to side margin or separated from it by a distance of less than half its diameter; sometimes also with dorsal spots. Elytral punctuation coarser ..... *P. sacerdos* n.sp., var.

— Elytra in basal half with a rounded marginal spot, separated by at least its own diameter from margin; usually with a rounded dorsal spot also. Elytral punctuation finer ..... *P. excavata* (Wse.), f. *nigronotata*

♀♀ still unknown for *P. prasina* Silfv. and *P. semifasciata* n.sp.

The *dregei* group

The species of this group are characterized by a raised knob on the hind margin of the male pronotum. The pronotum is about $1^1/_2$—$1^3/_4$ as broad as long, with its sides curved distinctly inwards, shining, without or with extremely fine punctuation and without microsculpture. The transverse depression is distinct at the sides, obliterated (♂) or weakened (♀) medially, straight or curved. In the male the central part of the pronotum is rather flat; behind the middle there is a depression, and behind this depression the raised knob, which is about × $1^1/_2$ as long as broad, with a pointed or rounded anterior end and a blunt posterior end. The hind margin is bordered in the male about half way to the middle; in the female the bordering reaches almost to the middle, but turns towards the anterior shortly before that, so that a triangular area is formed.

The scutellum is narrow and tongue-shaped in the male, with a sharp or rounded apex, in the female it is triangular and rounded or blunt at the apex.

The elytra of the male are raised at the base, with a tubercle which is directed mainly anteriorly, falling steeply towards the pronotum, rather steeply also towards the scutellum, but without any concavity.

Four species are recognised in this group.

Prosmidia dregei (Chapuis), 1876

For references and synonymy, see the subspecies.

Colour black, head (except for gula), prothorax (except for prosternum and epimeron), 1st and 2nd antennal segments, and outer margin of last abdominal segment yellowish or reddish, elytra yellowish or reddish, usually with more or less extensive black markings. Scutellum in ♂ also yellowish — reddish.

This is a widely distributed and variable species, in which four main subspecies can be recognized.

Prosmidia dregei dregei (Chapuis), 1876

Figs. 12, 22 D.

Diacantha dregei Dejean 1837:402 (nomen nudum).
Idacantha dregei Chapuis 1876:Pl.125, f. 1; Laboissière 1924:6. (Type: unknown).
Prosmidia dregei Weise 1902:296; Hincks 1949:612.
Prosmidia balteata ab. *dregei* Weise 1924a:22.
Diacantha balteata Péringuey 1892b:133. (Type, lectotype by present designation: ♂, Transvaal, Leydenb. distr., SAM).
Prosmidia balteata (Péring.), Weise 1924a:22.
Idacantha balteata (Péring.), Laboissière 1925a:40.
Prosmidia capensis Weise 1902:295, 296; Weise 1924a:22 (syn. of *balteata* Péring.). (Type, Lectotype by present designation: ♂, Cap, Staudinger, MNB).
Idacantha ornata Laboissierè 1926:192. New synon. (Type, lectotype by present designation: ♂, Chirinda Forest, Gazaland, March '07, David Odendaal, BMNH).
Prosmidia ornata (Lab.), Wilcox 1972:290.
(not) *Idacantha balteata* (Péringuey), Laboissierè 1921:70 (= ssp. *passeti* All., var.).

Medium-sized — large subspecies, with the light colour yellowish rather than reddish, although sometimes with a reddish tinge. Black colour of elytra in apical half forming a transverse band of varied breadth, sometimes very broad, reaching along suture to hind margin; often additional black spots, varying in size and number from one small rounded dorsal spot in basal half of elytron through specimens with this dorsal spot accompanied by a marginal spot at about the same distance from base and a small apical spot, to specimens where these spots are large and the dorsal one irregular in shape, or even connected with the marginal spot to form a band, interrupted at the suture; sometimes with an additional elongated spot along suture basally.

Elytral punctuation distinct but fine, punctures widely separated. Microsculpture distinct, often fairly strong, reducing shine of elytra.

None of the specimens studied has the black colour extending along the hind margin, enclosing a yellow spot, or covering the whole apical half (compare with the following subspecies).

Male genitalia characterized by the comparatively slight curvature of the large ostial hook (fig. 22 D).

Length 8.1—10.8 mm, breadth 4.2—5.5 mm.

Types. Dejean (1837) was the first to use the name *dregei,* but it was validated only by Chapuis (1876), when the name was accompanied by an illustration. It has not been possible to trace the specimen from which this illustration was drawn, and as the only

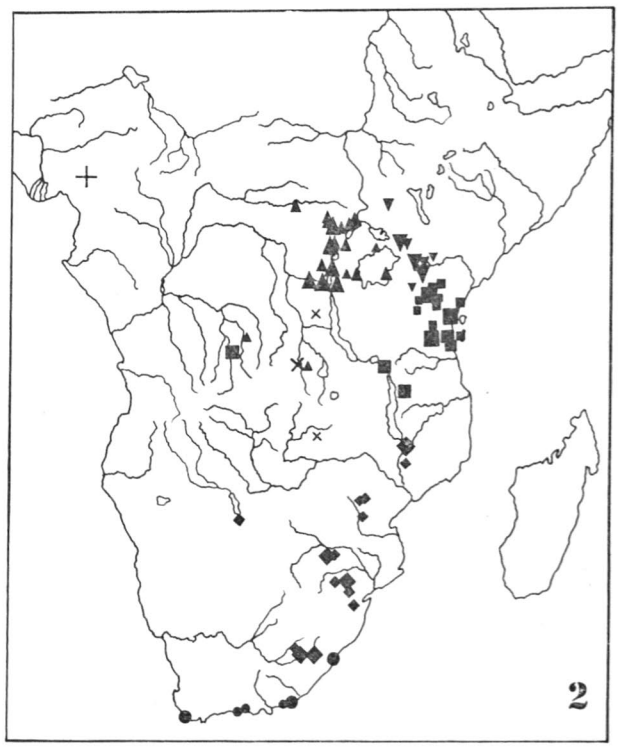

FIG. 2. Distribution of *Prosmidia dregei dregei* (◆), *P. d. passeti* (■), *P. d. suturalis* (▼), *P. d. hastata* (▲), *P. sexplagatia* (●), *P. sacerdos* (+) and *P. decemmaculata* (×).

other information given refers to the collecting locality — Natal — it may be quite impossible to trace. The specimen in question is definitely not included in the Dejean collection (MZT), as none of the specimens there has the black markings of the illustration. Nevertheless, the creation of a neotype seems to me unnecessary, since to my knowledge no other species even remotely resembling the specimen figured exists in the type area.

PÉRINGUEY (1892b) described the species *Diacantha balteata* from Transvaal, and it is clear from his description that he had at least one male and one female specimen. In the collections of SAM, however, there is only one male specimen carrying appropriate labels — the locality, and a label in what is undoubtedly Périguey's handwriting, saying *Diacantha balteata,* typ. I designate this specimen the lectotype.

When WEISE (1902) described the species *Prosmidia capensis* he did not mention the number of specimens examined. As the locality for this species he gave Caput bonae spei (which in his work, as in so many others, seems to be synonymous with South Africa). In the collections of MNB there is just one specimen labelled Cap., collected by Staudinger. It also has a label in Weise's writing, saying *Prosmidia capensis* m., and I designate it the lectotype.

LABOISSIÈRE (1926), in his description of *Idacantha ornata,* mentions the locality (Chirinda forest, Mt. Chirinda) and two collectors (Marshall & Odendaal), and furthermore that the specimens are in BMNH and his own collection (now in ZMH). I have been able to find four such specimens, two of which — ♂ and ♀, both in BMNH — carry a label saying »Type», the other two »Cotype». Of the two specimens labelled »Type» I designate the male specimen, collected by Odendaal, the lectotype.

Distribution. This subspecies is found in South Eastern Africa, from Natal and Lesotho to Malawi, and to Botswana (Ngami). (Fig. 2). I have seen no specimens that are definitely from the Cape Province.

Specimens examined:

Malawi

Southern. Zomba, April 1958, Stuckenberg, 2 exx. (SAM); Mlanje, 23.Apr.1913, S. A. Neave, 1 ex. (BMNH); Mlanje, Jan.Feb.1914, J. B.Davey, 1 ex. (BMNH).

Mozambique

Zambesia. Foothills N. of Mt. Chiperone, 2500 ft., 19.11.1913, S. A. Neave, 1 ex. (BMNH); Zambesi, 1 ex. (BMNH).
Gaza. Amatonga, Feb.1917, R. Lowe Thompson, 1 ex.

Rhodesia

Manicaland. Chirinda Forest, Mch'07, David Odendaal, 3 exx., lectotype and paralectotypes of *ornata* (BMNH, ZMH); Chirinda For., Nov.1901, G. Marshall, 3 exx. (BMNH); Chirinda Forest, 3800 ft., 22.2.07, C. P. M. Swynnerton, 1 ex. (BMNH); Chirinda F., XII.52, v. Son, 1 ex. (SAM); Mt. Chirinda, Nov.1901, G. Marshall, 1 ex. (BMNH); Mt. Chirinda, Nov.—Dec.'01, G. A. K. Marshall, 2 exx., 1 paralectotype of *ornata* (BMNH); Melsetter, Dec.1901, G. A. K. Marshall, 14 exx., (BMNH); Mt. Selinda, 9—17.IV.1956, v. Son & Vári, 1 ex. (SAM); Umtali Dist., Nov.1945, E. C. G. Pinhey, on *Dicliptera,* 1 ex. (SAM).

Swaziland

Isoka, 22.XI.56, coll. Breuning, 1 ex. (MAC).

South Africa

Transvaal. Leydenburg Dist., 1 ex., *balteata* lectotype (SAM); Leydenburg Dist., coll. Jacoby, 1 ex. (BMNH); Zoutpansberg, Mp'hôme, Magd. Knothe S., 2 exx. (MNB); Louis Trichard, I.57, leg. Zumpf, 1 ex. (MFT); Skukuza, 10.1962, P. P. Moor, 1 ex. (TMP); Magoebaskloof, I.1961, P. P. Moor, 2 exx. (TMP).
Natal. Van Reenen, Drakensberg, 1—22.1.1927, R. E. Turner, 2 exx. (BMNH); Natal, 1 ex. (MNB).
Cap, Staudinger, 1 ex., lectotype of *capensis* (MNB); Caffraria, Drege, 1 ex. (MNB); S. Africa, Jacoby coll., 1 ex. (BMNH); Cap. B. Spei, Drege, 1 ex. (RMS); Cap. b. sp., coll. Brancsik, 2 exx. (MFT).

Lesotho

Vallée du Hᵗ Orange, 1500 m, E. Haug, 1906, 3 exx. (MNHN); Maseru, R. Ellenberger, 1923, 1 ex. (MNHN).

Botswana

Ngami, coll. Clavareau, 1 ex. (MAC).

Variation. The material available is limited, and a number of the specimens are insufficiently labelled. Therefore it seems pointless to analyse this small amount further

TABLE 2. Size variation in *P. dregei dregei.*

	n	length $\bar{x}$	length s	breadth $\bar{x}$	breadth s
♂♂	25	92.3	8.4	54.7	4.5
♀♀	25	95.9	7.0	57.5	3.6

for geographic variation. The names used for this race have been given to the colour forms in the following way:

No dorsal spot, transverse band not extending to apex — *balteata* Pér. and *capensis* Wse. (Fig. 12 A—B).

Small dorsal spot anteriorly — *dregei* Chap. (Fig. 12 C).

Small dorsal spot anteriorly and another near apex, transverse band extending forwards along suture — *ornata* Lab. (Fig. 12 D).

For the entire material the statistics in table 2 have been calculated.

As already stated, I consider *ornata* a synonym of *dregei.* The *ornata* colour pattern is connected with that of the typical *dregei* by intermediate forms, and these colorations are in no way geographically distinct. No other distinguishing characters were found, either.

Prosmidia dregei passeti (Allard), 1888 new combination

Figs. 13, 22 C.

Diacantha passeti ALLARD 1888:318, 323. (Type: ♂, Afrique trop., Ex Musæo E. Allard, MNHN).
Prosmidia passeti (All.), WEISE 1902:295; WEISE 1903:54; WEISE 1924a:23; WEISE 1924b: 11, 12; WILCOX 1972:290.
Idacantha passeti (All.), WEISE 1909:195; LABOISSIÈRE 1921:67; LABOISSIÈRE 1925a:40.
Aulacophora pygidialis FAIRMAIRE 1891:304. (Type not seen).
Prosmidia pygidialis (Fairm.), WEISE 1902:295.
Prosmidia passeti var. pygidialis (Fairm.), WEISE 1903:55; WEISE 1924a:23; WEISE 1924b:12.
Idacantha passeti ab. *pygidialis* (Fairm.), WEISE 1909:196.
Idacantha suahelorum var. *pygidialis* (Fairm.), BRYANT 1960:355.
Prosmidia bennigseni WEISE 1902:295, 297. (Type, lectotype by present designation: ♂, Dar-es-Salaam, Paul [Weise], MNB).
Prosmidia passeti var. *bennigseni* Wse., WEISE 1903:55; WEISE 1924a:23; WEISE 1924b:12.
Prosmidia passeti var. *aequalis* WEISE 1903:55; WEISE 1924a:23; WEISE 1924b:12. (Infrasubspecific).
Idacantha passeti var. *balteata* (Péring.), LABOISSIÈRE 1921:70.
(not) *Idacantha passeti* (All.), LABOISSIÈRE 1924:6 (= ssp. *suturalis* Jac.).
(not) *Prosmidia passeti* (All.), WEISE 1927:15 (= ssp. *suturalis* Jac.).
(not) *Idacantha passeti* (All.), BRYANT 1956:404 (= ssp. *hastata* Lab.).
(not) *Idacantha passeti* (All.), BRYANT 1959:220 (= *Prosmidia sexplagiata* Jac.).
(not) *Diacantha passeti* var. (*pygidialis* Fairm.), GAHAN 1909:218 (= ssp. *suturalis* Jac.).
(not) *Prosmidia passeti* (All.), SILFVERBERG 1972:42 (= ssp. *suturalis* Jac.).

Medium-sized — large subspecies; light colour mostly brownish red, although in a considerable percentage of a rather yellowish hue. Elytra sometimes entirely reddish (yellowish), but in most cases with black colour, varying from a more or less narrow transverse band through specimens with black colour enclosing a light spot apically to specimens where the entire apical half of the elytra is black. Black colour not normally extending forwards along suture as a cusp. None of the specimens seen have black spots on basal half of elytra.

Elytral punctuation as in preceding subspecies, but microsculpture less conspicuous; elytra therefore more shining.

Male genitalia: Large ostial hook with stronger, even curvature. (Fig. 22 C).

Length 8.3—12.0 mm, breadth 4.1—5.7 mm.

Types. ALLARD (1888) gives the distribution »Afrique trop.» for the species *Diacantha passeti*. The Allard collection (MNHN) has only one specimen carrying that label and the name, a specimen that had already been labelled as the holotype. This labelling is indisputably correct.

The species *Aulacophora pygidialis* was described by FAIRMAIRE (1891) from specimens in the museum in Vienna. The specimens in question could not be found at that museum at present (personal communication), but it is to be hoped that they may turn up later. Only when this material is available, am I prepared to designate a lectotype, and the specimen in MNHN carrying a paralectotype label will remain without formally fixed status till then.

Prosmidia bennigseni was described by WEISE (1902) from specimens collected at Mombo and Dar-es-Salaam by R. v. Bennigsen, and Paul Weise. In the collections of MNB there are three specimens from Mombo and two from Dar-es-Salaam agreeing with the description. One of those from Dar-es-Salaam has a label in Weise's handwriting with the text v. *Bennigseni* m., and I designate it the lectotype.

Distribution. Eastern and southern Tanzania and southernmost Kenya. Furthermore, there seems to be an isolated occurrence in central Zaire. (Fig. 2).

Specimens examined:

Kenya

Eastern. Campi Simba, 3/7—VI—1913, Dr. Bayer, 3 exx. (MAC); Ikutha, 5 exx. (MNB); Kibwezi, G. Scheffler S. V., 3 exx (MNB); Kibwezi, Huebner S. V., 2 exx. (MNB); Kibwezi (Wa-Kumba), Ch. Alluaud, 1904, 1 ex. (MNHN); Kibwezi, XII—30—1959, E. S. Ross, 1 ex. (CAS).

Coast. Taveta, Alluaud & Jeannel, Mars 1912, 750 m, St. 58, 1 ex. (MNHN); Mombasa, VI.07, K. Schauer S. V., 3 exx. (MNB).

Tanzania

Tanga. Usambara, Hohenfriedeberg, 4 exx. (MNB); Usambara, Neu-Bethel, 6 exx. (MNB); Usambara, Nguelo, coll. Brancsik, 5 exx. (MFT); Usambara, Nguelo, coll. Clavareau, 1 ex. (MAC); Usambara, Shume-Wald, II.1963, E. Haaf, 1 ex. (MFT); Usambara, Magamba, E. Haaf, XI.1959, 3 exx. (MFT); W. Usambara, 19 exx. (MNB, ZSM); Usambara, Götzelmann, 3 exx. (ZMK); Usambara, 9 exx. (MNB, RMS); Wilhelmstal, J. Buchwald S., 3 exx. (MNB); Tanga, Küstenbusch, leg. Methner, 1 ex. (MNB); Kwai, Paul [Weise], 2 exx. (MNB); Amani, Vosseler G., 4 exx (MNB); Noko, Stolz, 1 ex. (MNB); Mombo, Paul [Weise], 5 exx. (MNB); Sakarre, 1 ex. (MNB); Nyunda, Samml. J. N. Ertl, 1 ex, (ZSM); Bumbuli, 29.XII.02, Meinhof S. G., 1 ex. (MNB).

Kilimanjaro. Kilimanjaro, Sjöstedt 1905—06, Kibonoto 1300—1900 m, 3 maj, 1 ex. (MNB), ibid. 4 maj, 1 ex. (RMS), ibid. 9 maj, 1 ex. (MNB), ibid. 11 maj, 1 ex. (MNB); Kilimanjaro, Sjöstedt, Kibonoto 1000—1200 m, 16 mars, 1 ex. (MNB); Kilimanjaro, Sjöstedt, kulturz. 7 april, 1 ex. (MNB), ibid. 9 april, 2 exx. (RMS); Kilimandjaro, Madschame, 3 exx. (MNB, MNHN); Kilimandscharo, Dschagga-Land, Madschame, T. Paesler S., 2 exx. (MNB); Kilimandjaro versant sud-est, Kilema, 1440 m, zone des cultures, Alluaud & Jeannel, Mars 1912, St. 67, 2 exx. (MNHN); Kilimandjaro versant sud-est, Au-dessus de Marangu, 1800—2600 m, zone des forèts, Alluaud & Jeannel, Mars—Avril 1912, St. 69, 1 ex. (MNHN); Kilimandjaro, Moschi, Methner S., 1 ex. (MNB); Kilimandjaro, leg. Methner, 2 exx. (MNB); Pare-Geb., coll. J. N. Ertl, 2 exx. (ZSM); Pare, 2000 m, Chr. Schröder, 1 ex. (MNB).

Arusha. Momella, Mt. Meru, E. Haaf, XII.1959, 2 exx. (MFT); Mt. Meru, Momella, 1600—1800 m, 30.I.1964, leg. W. Forster, 1 ex. (ZSM).

Coast. Bagamoyo, Staudinger, 1 ex. (MNB); Dar-es-Salaam, Paul [Weise], 3 exx., including lectotype of *bennigseni* (MNB); Dar-es-Salaam, coll. Oberthur, 1 ex. (MNHN); Ukami, Bennigsen, 1 ex. (MNB).

Morogoro. Mkatta, V—VI.09, R. Schoenheit S. G., 1 ex. (MNB); Mhondo — Ouzigoua, A. Hacquart, 1879, 8 exx. (MNHN); Mrogoro, Leroy, 1889, 2 exx. (MNHN); Mrogoro, R. P. Gommenginger, 8 exx. (MNHN); Morogoro, 26.II.21, N. C. E. Miller, 1 ex. (BMNH); Uluguro-Berge, Ostseite, Urwald, III.1963, E. Haaf, 1 ex. (MFT).

Iringa. Uheheland, Kidugala, 4 exx. (MNB).

Mbeya. Manow, 3 exx. (MNHN, MNB, ZSM); Rungwe, V.99, Stolz, 1 ex. (MNB); Rungwe-Berge, 2500 m, I.1963, E. Haaf, 14 exx. (MFT); Langenburg (= Tukayu), Rolle, 1 ex. (MAC).

Ruvuma. Kigonsera, 3 exx. (ZSM).

Zanzibar. Ins. Zanzibar, Hildebr. 1 ex. (MNB).

D.O. Afr., coll. Brancsik, 3 exx. (MFT); D.Ost-Afrika, 1 ex. (MNB); Ost-Afrika, Höhnel 88, Ex Musæo L. Fairmaire, 1 ex., *pygidialis* »paralectotype» (MNHN); Afrique trop., Ex Musæo E. Allard, 1 ex., *passeti* holotype (MNHN)

Zaire

Kassai, Edm. Taymans, 1904, 9 exx. (MNHN).

TABLE 3. Size variation in *P. dregei passeti* colour forms and populations.

			breadth		length			*t* test (length upper right, breadth lower left)		
		n	$\bar{x}$	s	$\bar{x}$	s	*pa*	*py*	*be*	*ae*
♂♂	typical *passeti*	19	92.6	5.4	53.8	3.0	—	0.6	1.9	1.5
	v. *pygidialis*	10	93.7	4.0	55.7	2.5	1.8	—	1.4	1.0
	v. *bennigseni*	42	96.4	9.9	56.1	5.9	2.0	0.3	—	0.2
	v. *aequalis*	9	96.0	5.8	56.1	3.3	1.8	0.3	0.0	—
	total material	80	95.6	12.1	55.4	6.0				
	Kilimanjaro — S. Kenya	14	92.5	4.7	53.5	3.2				
♀♀	typical *passeti*	30	95.8	8.4	57.3	5.1	—	0.8	2.7	0.3
	v. *pygidialis*	10	97.8	6.3	57.9	3.7	0.4	—	1.8	0.5
	v. *bennigseni*	31	102.7	10.8	59.7	6.0	1.7	1.1	—	2.2
	v. *aequalis*	11	96.5	6.6	56.7	3.6	0.4	0.8	2.0	—
	total material	82	98.9	12.2	58.2	7.7				
	Kilimanjaro — S. Kenya	15	96.8	8.2	57.4	5.2				

Variation. The main colour forms of this subspecies have their own names; that with no black markings (fig. 13 A) is known as *aequalis,* the typical *passeti* being the colour form with a transverse band (fig. 13 B—D), *pygidialis* having the apical part of the elytra black with a light spot (fig. 13 E—F), and *bennigseni* being the form where the entire apical half of the elytra is black (fig. 13 G). Of these forms v. *aequalis* is isolated, while the other three make an intergrading series. Of these three forms the typical *passeti* is smallest on average, and v. *bennigseni* largest (see the statistics).

The percentages of these colour forms in the entire material of this subspecies are as follows: *passeti* 30 %, *pygidialis* 13 %, *bennigseni* 45 % and *aequalis* 12 %.

The specimens from Kilimanjaro and southernmost Kenya seem to form a separate population exhibiting several distinct traits. In these specimens the black colour extends forwards some way along the suture; the size is somewhat smaller, but not significantly so. The ratio between the colour forms differs from that in other areas: of 29 specimens only 3 belong to v. *bennigseni,* while 14 are typical *passeti* and 12 are v. *pygidialis.* However, the size and generally reddish shade of the light colour of the elytra agrees in these specimens with the ssp. *passeti.* This population has presumably received some genes from the following subspecies.

The specimens from central Zaire also seem to stand apart, but the material is here rather too small for any confident conclusions. Of the 9 specimens seen, 8 belong to v. *bennigseni* and the remaining one to v. *pygidialis,* although the apical spot is rather small. The specimens are, moreover, somewhat shorter and broader, the elytral dimensions for the males having the mean values 87.8 and 53.8, for the females 91.8 and 54.6. More material will, however, be necessary before any further action should be taken.

A definite size trend (table 3) is evident for the first three colour forms, but not for v. *aequalis.* If we compare the Kilimanjaro population with the others, we obtain the following t values: for the ♂♂ length 1.7, breadth 1.7 and for the ♀♀ length 0.8, breadth 0.5. These values are quite low, which is partly due to the limited material available.

Prosmidia dregei suturalis Jacoby, 1908, new combination

Figs. 14, 22 E.

Prosmidia suturalis Jacoby 1908:521; Jacoby 1922:775. (Type, lectotype by present designation: ♂, Afrique Orient. angl., Molo, Maurice de Rothschild, 1906, MNHN).
Diacantha passeti var. *(suturalis* Jac.), Gahan 1909:219.
Prosmidia passeti ab. *suturalis* Jac., Weise 1910:38; Weise 1924a:23, Weise 1924b:11; Weise 1927:15.
Idacantha passeti var. *suturalis* (Jac.), Laboissierè in Jacoby 1922:775; Laboissière 1924:6.
Idacantha hastata var. *suturalis* (Jac.), Bryant 1960:356.
Prosmidia dregei suturalis var. *transversalis* nov. var. (Infrasubspecific).
Diacantha passeti var. *(pygidialis* Fairm.), Gahan 1909:218.
Idacantha passeti (All.), Laboissière 1924:6.
Prosmidia passetti (sic) (All.), Weise 1927:15.
Prosmidia passeti (All.), Silfverberg 1972:52
Prosmidia suahelorum Wse., Jacoby 1922:76.
(not) *Idacantha passeti* var. *suturalis* (Jac.), Weise 1912:141 (= ssp. *hastata* Lab.).

Small — medium-sized subspecies. Light colour yellowish, rarely reddish; black colour forming an elongated spot along the suture apically, reaching forwards beyond the middle, and large lateral spots, also in the apical half. Lateral and sutural spots mostly connected by a usually narrow transverse band (var. *transversalis* nov.); sometimes black colour also extending round apex, encircling a large rounded light spot. Occasionally one or more black spots, dorsally or laterally in the basal half, or apically. Sutural and lateral spots, if separate, usually with at least cusps towards one another.

Elytral punctuation and microsculpture similar to that of the preceding subspecies.

Male genitalia: large ostial hook with an even stronger curvature than in the preceding subspecies (fig. 22 E).

Length 7.8—10.4 mm, breadth 3.5—4.8 mm.

Types. When JACOBY (1908) described the species *Prosmidia suturalis* he gave Molo as the type locality and M. de Rothschild as the collector, but did not mention the number of specimens. In MNHN there are 11 specimens labelled in this way, in BMNH 2 such specimens. Of the MNHN specimens 2 are of the form *transversalis,* the remainder typical *suturalis.* All these specimens are labelled »*Prosmidia suturalis* Jac. Type 1907». I choose one of the Paris specimens, a male without a transverse band, which carries a blue type label (the other type labels are white) and designate it the lectotype.

The variety *transversalis* m. is an infrasubspecific form, and has thus no standing in nomenclature. Therefore no type is needed.

Distribution. Kenya Highlands and adjacent areas of Sudan, Uganda and Tanzania. The boundary between this subspecies and the preceding one runs in a roughly SW—NE direction from between Ngorongoro and Kilimanjaro into S. Kenya (fig. 2).

Specimens examined:

Sudan

Equatoria. Imatong Mts., Kateri — Gilo, 18.3.1963, R. Linnavuori, 1 ex. (MZH).

Kenya

Rift Valley. Hoey's Bridge, 6200 ft., May 1924, C. R. S. Pitman, 2 exx. (BMNH); Lumbwa, Lovén, 2000 m, aug., 1 ex. (RMS); Nandi Escarpment (Forest), 5800 ft., May 29, 1911, S. A. Neave, 4 exx. (BMNH); Landiani (2500 m) (Mau Escarpment) Ch. Alluaud, 1904, 1 ex. (MNHN); Mau-escarpment, Molo, Alluaud & Jeannel, Déc. 1911, 2420 m, St. 19, 17 exx. (MNHN); Molo, Maurice de Rothschild, Sept. 1906, 13 exx., lectotype and paralectotypes of *suturalis* (MNHN, BMNH); Molo (Mau Escarpment) 2150—2200 m, 11/12—IV—1957, Basilewsky & Leleup, 4 exx. (MAC); Naivasha, Maurice de Rothschild, Sept., 1 ex. (BMNH); Kikuyu-esct., Kijabé, Alluaud & Jeannel, Fév. 1912, 2100 m, St. 58, 3 exx., 1 type of *Idacantha passeti* v. *sexpunctata* Lab. — nomen nudum — (MNHN); Rift Valley, 23.VI.1929, Miss P. M. Jenkin, 1 ex. (BMNH); Escarpment, 6500—9000 ft., IX.00—IV.01, W. Doherty, 32 exx. (MNHN); Escarpment, Maurice de Rothschild, Sept. 1906, 2 exx. (MNHN).

Central. Monts Aberdare versant sud-ouest, Alluaud & Jeannel, Lisière infer. des forèts et prairies decouvertes, 2600—2700 m. Févr.1912, St. 57, 1 ex. (MNHN); Kenia (SO) Prairies 2000 m, Nyère, Ch. Alluaud, 1909 Nov., 1 ex. (MNHN); Mt. Kenya, 1960, Westhang, 2700 m, leg. Löffler, 1 ex. (MFT); Lagari Mch 1 to May 29 1900 (Mile 469), C. S. Betton, 7 exx. (BMNH); Lari, 15.VIII. to 26.IX1899, C. S. Betton, 1 ex. (BMNH); Thajana, Gregory coll., 1 ex. (BMNH); Rogoro, Kikuyu Forest, 29.X. to 14.XII.1899, C. S. Betton, 1 ex. (BMNH); Kikuyu, 4.V.02, F. Thomas V., 5 exx. (MNB); Kedong Valley, Mars 1913, G. Babault, 4 exx. (MNHN).

Nairobi. Nairobi, Guy Babault, 31 exx. (MNHN, MAC); Nairobi, coll. Clavareau, 1 ex. (MAC); Nairobi, 4 exx. (MNB); Nairobi, Ch. Alluaud, 1903, 1 ex. (MNHN).

Kenya or Uganda

Elgon, Lovén, 2000 m, maj, 1 ex. (RMS); Elgon, Lindblom, 1 ex. (RMS); Mt. Elgon, 2200 m, leg. Alinder, 19 exx. (ZSM); Br. O. Afr., Lovén, 7 exx. (RMS); Brit. O. Afr., Lindblom, 6 exx. (RMS).

Tanzania

Arusha. Kitumbeni-Vulkan, leg. Methner, 1 ex. (MNB); Terr. Ngorongoro, Rest Camp, 2400—2500 m, 6/19—VI—1957, P. Basilewsky & N. Leleup, 5 exx. (MAC).

Variation. The elytral coloration of this subspecies falls mainly into two categories, the form in which sutural and lateral spots are separate (fig. 14 A—C) being the typical *suturalis,* and that in which the spots are united by a transverse band (fig. 14 D—G) being called var. *transversalis.* One specimen, carrying rather large dorsal and lateral spots in the basal half and distinct apical spots (fig. 14 G), has been labelled by Laboissière *Idacantha passeti* v. *sexpunctata,* but this variety seems never to have been described.

Of the two main colour forms the typical *suturalis* is on the whole smaller. The two forms occur in the same areas, having in some cases even been collected together. In the entire material 28 % are typical *suturalis,* 72 % v. *transversalis.*

The size statistics are given in table 4.

Prosmidia dregei hastata (Laboissière), 1921 new combination

Figs. 15, 22 F.

Idacantha hastata Laboissière 1921:67; Laboissière 1925a:40; Laboissière 1929a:326; Laboissière 1940a:13; Bryant 1958:42. (Type, lectotype by present designation: ♂, Lesse, Lt. Bonnevie, MAC).
Prosmidia hastata (Lab.), Wilcox 1972:290.
Idacantha hastata var. *limbata* Laboissière 1921:70; Laboissière 1925a:40; Laboissière 1929b:143; Laboissière 1940:13. (Infrasubspecific).
Idacantha hastata var. *humeralis* Laboissière 1921:70; Laboissière 1925a:40. (Infrasubspecific).
Prosmidia passeti ab. *vittulina* Weise 1924b:11, 12. (Infrasubspecific).
Idacantha passeti ab. *vittulina* (Wse.), Laboissière 1925a:40; Laboissière 1929b:143 (syn. of *hastata* Lab.).
Idacantha passeti var. *suturalis* (Jac.), Weise 1912:141.
Idacantha passeti (All.), Bryant 1956:404.

Small — medium-sized subspecies. Light colour yellowish, very rarely reddish; black

Table 4. Size variation in *P. dregei suturalis* colour forms.

		n	length $\bar{x}$	length s	breadth $\bar{x}$	breadth s
♂♂	typical *suturalis*	20	84.1	6.8	46.1	4.9
	v. *transversalis*	49	86.5	8.3	49.1	7.6
	total material	69	85.3	9.2	48.3	8.0
♀♀	typical *suturalis*	15	89.4	7.3	48.5	4.8
	v. *transversalis*	42	90.3	9.5	51.3	5.6
	total material	57	90.1	10.1	50.5	6.6

colour of elytra sometimes reduced to a narrow border along the apical half of suture, but more often forming a transverse band extending forwards as three cusps, one at suture and one at about the middle of each disc, and hindwards along the suture and the side margins, occasionally enclosing a yellowish spot at apex; the transverse band may also be reduced to spots. Elytra rarely almost entirely black, with only a small lighter area at base. No specimens with additional dorsal spots in anterior half of elytra observed.

Elytral punctuation and microsculpture as in the preceding subspecies.

Male genitalia: Large ostial hook very strongly curved, forming a rounded angle, and from that point to apex almost straight. (Fig. 22 F).

Length 7.5—11.1 mm, breadth 3.4—5.2 mm.

Types. LABOISSIÈRE (1921) lists a number of specimens from different localities. In MAC there are a number of such specimens, which also have type labels. Of these I choose one male specimen from Lesse, collected by Lt. Bonnevie, and designate it the lectotype.

Distribution. Eastern Zaire and the interlacustrine area, eastwards to the east of Lake Victoria. (Fig. 2).

Specimens examined:

Zaire

Haut-Zaire. Bambesa, X—1933, H. J. Brédo, 1 ex. (MAC); Entre Stanleyville (= Kisangani) et Lisala, XI—1925, S. A. R. Prince Léopold, 1 ex. (MAC); Haut-Uele, Moto, L. Burgeon, 3 exx. (MAC); Haut-Uele, Abimva, VI—VII—1925, L. Burgeon, 1 ex. (MAC); Ituri: Irumu, V. 1960, Dr. V. Allard, 1 ex. (MAC); Ituri: Bunia, 1938, P. Lefèvre, 8 exx. (MAC); Nioka, J. Hecq, 20 exx. (MAC); Mongbwalu, 1939, Mme A. Lepersonne, 1 ex. (MAC), ibid. Mme Scheitz, 1 ex. (MAC); Vieux Kilo, V. 1935, R. P. Thalman, 1 ex. (MAC); Stanleyville à Kilo, L. Burgeon, 1 ex. (MAC); Kwesi à Kilo, 10—19—IV—1911, Dr. Bayer, 4 exx., v. *limbata* & v. *humeralis* types (MAC, ZMH); Ituri — Medje, 29.3.1914, Dr. Christy, 1 ex., v. *limbata* type (MAC); Ituri: Nioka, J. V. Leroy, 21 exx. (MAC); Nioka, VII—1937, J. Ghesquière, 1 ex. (MAC); Ituri: Blukwa, 15—XI—1928, A. Collart, 1 ex. (MAC); Blukwa, 17—X—1931, J. Vrydagh, 2 exx. (MAC); Ituri: Mahagi — Pori, 1931, Ch. Scops, 2 exx. (MAC); Mahagi — Niarembe, XI—1935, M. & Me Ch. Scops, 7 exx. (MAC); Kibali — Ituri: Geti, 1934, Ch. Scops, 1 ex. (MAC); Ituri: Mont Rona, 5.V.1953, J. Hecq, 2 exx. (MAC); Kibali — Ituri: Kilomines, G. Smoor, 2 exx. (MAC); S. W. v. Albert-See, Mboga, 3.08. Exped.: Herzog Adolf Friedrich z. Mecklenburg, 1 ex. (MNB); W. Albert-Njansa, Ituri-Fährte, 24.VIII.91, Stuhlmann S., 1 ex. (MNB); Entre Irumu et Mombasa, 14.X.1931, Mme L. Lebrun, 3 exx. (MAC).

Kivu. Beni, Lt. Borgerhoff, 16 exx., paratypes of *hastata* and types of v. *limbata* (MAC, ZMH); Beni, Ituri Forest, 1946, T. H. E. Jackson, 2 exx. (BMNH); Beni à Lesse, fin VII—1911, Dr. Murtula, 9 exx., paratypes of *hastata* (MAC, ZMH); Lesse, Lt. Bonnevie, 2exx., lectotype of *hastata* and type of v. *limbata* (MAC); Ituri: Butembo, XI.1929, Mme Van Riel, 1 ex. (MAC); Terr. Lubero, 2.200 m, 28.XI.1951, I.R.S.A.C., N. Leleup, Récolté dans l'humus, 1 ex. (MAC); 9 mi. S. of Lubero, 2150 m, IX—23—1957, E. S. Ross & R. E. Leech, 1 ex. (CAS); Ruwenzori, 22.XI.—31, Vall. Butagu (2000 m), Mme L. Lebrun, 9 exx. (MAC); Ruwenzori: Kalonge (2050 m), 6/11.VIII. 1932, L. Burgeon, 15 exx. (MAC); W. Ruwenzori: Kalonge, VIII—1932, Dr. Van Hoof, 26 exx. (MAC); W. Ruwenzori: Mutwanga, 1932, Dr. Van Hoof, 4 exx. (MAC); Kalonge (± 2050), VII.1935, H. J. Bredo, 1 ex. (MAC); Nördl. v. Alb.-Edw.-See, Ruwensori Westseite, 2.08. Exped.: Herzog Adolf Friedrich z. Mecklenburg, 11 exx. (MNB); Westl. v. Ruwensori, N. W. Beni (Urwald), 1.08. Exped. id., 1 ex. (MNB); N. Alb.-Edw.-See, Ru-Nssororo, 2600 m, 9.VI.91, Stuhlmann S., 1 ex. (MNB); Région des Lacs, Dr. Sagona, 10 exx., paratypes of *hastata,* types of v. *limbata* and v. *humeralis* (MAC); Lac Kirwa, IX.1932, 14 exx. (MAC); Beni, II.1931, Mme L. Lebrun, 3 exx. (MAC); Kissenyi, 17.4.1922, Van Saceghem, 2 exx. (MAC); N. E. Kivu: (La Mutura) Burunga, III.1928, Ch. Ceydel, 3 exx. (MAC); Burunga, 9.XII.1925, Dr. H. Schouteden,

3 exx. (MA); Rwankwi (N. Lac Kivu), J. V. Leroy, 110 exx. (MAC); Lulenga, IX—1932, L. Burgeon, 1 ex. (MAC); Kavumu à Kabunga km 82 (Mingazi), IV/VII—1951, H. Bomans, 1 ex. (MAC); Mokoto, G. Babault, 1 ex. (MNHN); Rutshuru, I.1928, Ch. Seydel, 1 ex. (MAC); Rutshuru, X.1932 (1280 m), L. van Roechout, 4 exx. (MAC), Rutshuru, 1937, J. Ghesquière, 2 exx. (MAC); Panzi, 1931, Ed. Luja, 2 exx. (MAC); Parc Nat. Albert (= P. N. Kivu), G. F. de Witte, many localities — see LABOISSIÈRE 1940a, 93 exx. (MAC); Kiwu-S., Ins. Kwidjwi, XI.07, Grauer S. V., 1 ex. (MNB); Bukavu, XI.59, E. Haaf, 4 exx. (MFT); Mulungu, Hendrickx, 26 exx. (MAC), 19.XI. 1932, L. Burgeon, 12 exx. (MAC), Mulungu, IV.1937, H. J. Brédo, 8 exx. (MAC), Mulungu, 5. V.1949, P. Lefèvre, Recolte sur *Phaseolus vulgaris* L., 2 exx. (MAC); Mulungu, 1953, G. Foucart, 3 exx. (MAC), Mulungu, V—1954, J. Decelle, 2 exx. (MAC), Mulungu, II—1956, J. Hecq, 5 exx. (MAC); Mulungu; Tshibinda, XI—1951, P. C. Lefèvre, 56 exx. (MAC), Mulungu: Tshibinda, XI—1955 — II—1956, J. Hecq, 8 exx. (MAC); Tshibinda, 21—27.VIII.1931, Mrs L. Ogilvie, 2 exx. (BMNH); Tshibinda, Prof. T. D. A. Cockerell, 1 ex. (BMNH); Ibanda, 1952, M. Vandelannoite, 4 exx. (MAC); Terr. Kabare, Lwiro, X—1953, I.R.S.A.C., 3 exx. (MAC); Kalonge près Tshibinda, 1936, J. V. Leroy, 1 ex. (MAC); Nyangisi, XI.1934, Ch. Seydel, 1 ex. (MAC); Reg. Lac Kivu, Kitembo, Guy Babault, 1927, 1 ex. (MNHN).

Shaba. Parc National Upemba, Lusinga (Kambwekanono), 31.V.1945, G. F. de Witte, 1 ex. (MAC).

Kasai occidental. Luluabourg (= Kananga), III—VII—1965, Jan Deheegher, 1 ex. (MAC).

N.W. Lac Tanganika, Grauer 1910, 3 exx. paratypes of *hastata* (MAC, ZMH).

Uganda

Western. E. Ruwenzori, 6—13000 ft, 1906, Coll. by Hon. G. Legge & A. F. R. Wollaston, 5 exx. (BMNH, MAC); Ruwenzori, Scott Elliot, 7—8000 ft. 95—41, 4 exx. (BMNH); Ruwenzori, Scott Elliot, 5300 ft. 95—41, 1 ex. (BMNH); Mpanga Forest, Toro, 4800 ft., 13—23.Nov.1911, S. A. Neave, 16 exx. (BMNH); Toro, 1—10.IV—1911, Dr. Bayer, 1 ex., type of *v. limbata* (MAC).

Eastern. Distr. Busoga, env. Jinja, I/III.1968, J. J. Rwabuneza, 9 exx. (MAC).

Rwanda

Parc Nat. Albert (= P. N. Volcans), G. F. de Witte, many localities — see LABOISSIÈRE 1940a, 5 exx. (MAC); Kibungu, X—XII—1937, R. Verhulst, 5 exx. (MAC); Kiwu-S., Kissenji, XI.08. v. Stegman S. G., 1ex. (MNB); D. O. Africa, Vulkangebiet am Kivu, Schlobach S. G., 1 ex. (MNB); Env. Astrida (= Butare), 1954/55, G. Foucart, 3 exx. (MAC); Rubengera, 1900 m, terr. Kibuye, P. Basilewsky, 12/II—53, 2 exx. (MAC); Mt. Mbude, S. du I. Luhondo, 2000 m, P. Basilewsky, 29—I—53, 1 ex. (MAC); Contref. Est Muhavura, 2100 m. P. Basilewsky, 28—I—53, 4 exx. (MAC); Contref. Sud Nyamateke, 2200 m, P. Basilewsky, 15—II—53, 4 exx. (BMNH, MAC); Rubona, 11.X—1967, G. Pierrard, 1 ex. (MAC).

Tanzania

West Lake. Bukoba, Eggel S., 1 ex. (MNB).
Mara. Bukima, IV—1948, J. V. Leroy, 4 exx. (MAC).
Mbeya. Manow, Staudinger, 2 exx. (MNB).
Victoria Njansa, 3 exx. (MNB).

Variation. In this subspecies three very distinct colour forms can be recognized. Of these, the form in which the black colour is reduced to a narrow border of the suture (fig. 15 A) has been described as v. *limbata,* and the one in which the elytra are almost entirely black, with some lighter colour at the base (fig. 15 F—G), has been given the name v. *humeralis*. The form in which the elytra have a transverse band (fig. 15 D—E) is the hypical *bastata,* while the form in which this band is interrupted (fig. 15 B—C) was described as v. *vittulina.* Of these forms v. *vittulina* and the typical *hastata* are united by intermediate forms, while v. *limbata* and v. *humeralis* are both isolated.

TABLE 5. Size variation in *P. dregei hastata* colour forms and populations

		n	length $\bar{x}$	length s	breadth $\bar{x}$	breadth s
♂♂	Kivu typ. *hastata*	101	89.2	10.0	52.0	6.1
	Kivu v. *limbata*	84	88.2	8.2	51.5	5.1
	Kivu total	185	88.7	12.2	51.8	7.5
	Ituri total	59	82.8	7.4	49.2	5.3
	Total material	258	87.5	14.7	51.3	9.4
♀♀	Kivu typical *hastata*	29	93.4	9.3	54.8	7.9
	Kivu v. *limbata*	58	90.7	9.7	53.9	8.9
	Kivu total	87	91.6	12.1	54.2	8.3
	Ituri total	17	90.2	8.4	54.1	4.3
	Total material	143	91.4	12.5	54.2	8.8

In the entire material studied the proportions of the colour forms are as follows: *hastata* (+ *vittulina*) 51 %, *limbata* 46 % and *humeralis* 3 %.

Some local populations seem to have characteristics of their own. Sufficient material for a study of this point was available only from Kivu and Ituri. In Kivu the proportion between *limbata* and *hastata* is about even (142 *limbata,* 129 *hastata*), while the Ituri population has a much higher percentage of *limbata* (57 *limbata,* 19 *hastata*). The specimens from Ituri are distinctly smaller (see above). Further east, the typical ***hastata*** becomes the dominant form, with few *limbata* specimens.

The forms *hastata* and *limbata* also exhibit differences in size (see above). However, these differences are not in themselves sufficient to account for the differences between the Kivu and Ituri populations, even though the high percentage of the smaller v. *limbata* in Ituri contributes to the smaller mean for that population.

The size statistics are given in table 5.

If the Kivu and Ituri populations are compared by the t test, quite high values are obtained for the males — length 4.5, breadth 2.9 — while the same values for the females are very low — 0.6 and 0.07. Under these circumstances, I prefer to keep the Kivu and Ituri populations within the same subspecies, especially since they exhibit the same colour forms, although in different proportions.

TABLE 6. Size variation in *P. dregei* subspecies.

		n	length $\bar{x}$	length s	breadth $\bar{x}$	breadth s	*t* test (length upper right, breadth lower left) *d*	*p*	*s*	*h*
♂♂	*dregei*	25	92.3	8.4	54.7	4.5	—	1.5	3.5	2.5
	passeti	82	98.9	12.2	58.2	7.7	0.6	—	5.2	5.0
	suturalis	69	85.3	9.2	48.3	8.0	4.9	6.0	—	1.6
	hastata	258	87.5	14.7	51.3	9.4	3.2	4.6	2.7	—
♀♀	*dregei*	25	95.9	7.0	57.5	3.6	—	1.4	3.0	2.6
	passeti	80	95.6	12.1	55.4	6.0	0.6	—	4.6	4.4
	suturalis	57	90.1	10.1	50.5	6.6	6.1	6.3	—	0.8
	hastata	143	91.4	12.5	54.2	8.8	3.3	3.6	3.2	—

Finally, the sizes of the four subspecies are compared by the t test in table 6. These values show that at least in dimensions the subspecies *dregei* and *passeti* are close to each other, as are *suturalis* and *hastata* to each other, too. In coloration, however, *dregei* and *passeti* exhibit quite different characteristics, while *suturalis* and *hastata* are somewhat closer to each other in this respect, too. Our present knowledge does not permit very far-reaching theories about the evolution of the subspecies, but the existence of the secondary intergrading area between *passeti* and *suturalis* (the Kilimanjaro population) suggests that *passeti* evolved in southern Tanzania and spread northwards, while *suturalis* possibly evolved in or near its present area. The specimens from central Zaire, here included in ssp. *passeti,* may represent an early splinter group from ancestral *passeti.*

Prosmidia sexplagiata (Jacoby), 1894

Fig. 16.

Aulacophora sexplagiata Jacoby 1894:187; Jacoby 1898:356. (Type, lectotype by present designation: ♂ Restit. 1885, M. R. Belg., ISN).
Prosmidia sexplagiata (Jac.) Weise 1902:295; Weise 1924a:23; Wilcox 1972:291.
Idacantha sexplagiata (Jac.), Laboissière 1925a:40.
Galeruca picea (F.), Olivier 1808: Pl.1, f.11, not Olivier 1808:616, not *Chrysomela picea* Fabricius 1781.
Diacantha picea (F.), Allard 188:317, 323.
Idacantha picea (F.), Jacoby 1891:39.
Prosmidia picea (All.), Weise 1902:295 (syn. of *sexplagiata* Jac.).
Idacantha passeti (All.), Bryant 1959:220.

Colour black, head (except for gula), prothorax (except for prosternum and epimeron), 1st and 2nd antennal segments, and outer margin of the last abdominal segment yellowish — orange, elytra yellowish — orange, with more or less extensive black markings. Scutellum of male also yellowish — brownish.

Variation in black markings of elytra considerable. Normally suture broadly black, apical area black with a lighter spot, and basal half of the elytra usually with a transverse band. Markings sometimes reduced or expanded (fig. 16), making some specimens hard to distinguish from some *P.d. dregei* with extensive black markings. In *sexplagiata* apex of elytra always black (not always all the way to the suture), in the nominate subspecies of *dregei* dark markings near apex, when present, in the form of spots considerably distant from margins.

Elytral punctures distinct but fine, and well separated from each other. Microsculpture distinct, often fairly strong, more or less diminishing shine of elytra.

Male genitalia similar to those of *Prosmidia dregei,* or slightly more pointed. Large ostial hook similar in curvate to that of *P.d. passeti.* (Fig. 22 G).

Length 8.3—10.6 mm, breadth 3.8—5.1 mm.

Types. Jacoby (1894), in his description of *Aulacophora sexplagiata,* mentions both male and female specimens, gives the distribution only as tropical Africa, and mentions the Brussels Museum and his own collection as places where the types are to be found. I have seen one male specimen from ISN, carrying the information M. R. Belg., Restit. 1885, and a label in Jacoby's handwriting, saying *Aulacophora 6plagiata* Jac. Type ♂; further I have seen one male specimen in BMNH carrying labels with the text Caffraria, Coll. Chapuis, Jacoby Coll., 1909—28a, Type, *Aulacoph. 6plagiata* Jac. I designate the ISN specimen the lectotype, and have labelled it accordingly.

The use of the name *picea* for this species was due to a mistake in illustrating the

book by OLIVIER (1808). While the text undoubtedly refers to the species nowadays known as *Stenoplatys picea* (F.), the illustration is clearly *Prosmidia sexplagiata.* Obviously, this was what caused ALLARD (1888) to use the name *picea* for this species.

Distribution. Southernmost Africa (Cape Province and Natal) (fig. 2). Unfortunately, many of the older collections made in South Africa are quite insufficiently labelled, so the true range of this species is still uncertain. Since ALLARD (1888) erroneously identified this species with Fabricius's *picea,* he gave the locality Sierra Leone for this species, and the error reappears in WEISE 1902 and 1924a.

Specimens examined:

South Africa

Cape Province. Cap. B. Spei, Victorin, 4 exx. (RMS); Cap. B. Spei, Åkerberg, 1 ex. (RMS); Knysna, E. J. G., 67, 1 ex. (SAM); Dunbrody, Jacoby Coll. 1909, 1 ex. (BMNH); Port Alfred, Jan.94, Albany Museum, Graham's Town, Distant coll., 1 ex. (BMNH); Bloukrans River, 20 miles ENE Plattenberg baai, 11.1.51, No 133, Swedish South Africa Expedition 1950—1951, Brinck — Rudebeck, 1 ex. (LUZ); Katberg, 4000 ft., XII.1932, R. E. Turner, 1 ex. (BMNH); Katberg, 1—10.II.1933, R. E. Turner, 1 ex. (BMNH); East London, 12.1916, Dr. Brauns, 1 ex. (TMP); East London, coll. Breuning, 1 ex. (MAC); East London, Dr. Martin, 1 ex. (MNHN); Bethel, S. O. Cpl. (Miss. Berlin), 1 ex. (MNB); Pirie Bush, 98—191, 1 ex. (BMNH).

Natal. Natal, 1 ex. (MNB); Natal, Fry coll. 1905, 1 ex. (BMNH).

Cape, Baly Coll., 1 ex. (BMNH); Cape, E. Newman, Ent. Club, 44—12, 1 ex. (BMNH); Cape, 67—56, 1 ex. (BMNH); C. Bon. Spei, Fry Coll., 1905, 1 ex. (BMNH); Cap. b. spei, Baly Coll., 1 ex. (BMNH); Cap., ex Musæo E. Allard, 1 ex. (MNHN); Cap. bon. sp., Ex Musæo, E. Allard, 1 ex. (MNHN); Cap. b. Esp., coll. Bonvouloir, 2 exx. (MNHN); Cap, Krebs, 1 ex. (MNB); Cap. B. Spei, 1 ex. (RMS); Cap, Ex Musæo Mniszech, 2 exx. (MNHN); Caffraria, Coll. Chapuis, Jacoby Coll., 1909, 1 ex. parolectotype (BMNH); Kaffra, 1 ex. (BMNH); P. B. Spei, Graham I., Fry Coll., 1 ex. (BMNH); Int. S. Africa, Earl of Derby, 1 ex. (BMNH); S. Africa, Barrett, 1903, 1 ex. (BMNH); Afr.mer., 1 ex. (MNB); Afrique, coll. Clavareau, 1 ex. (MAC); [Africa] Restit. 1885, lectotype of *sexplagiata,* 1 ex. (ISN).

Variation. The different colour forms (fig. 16) present an intergrading series, the extreme forms being rather rare. The small amount of material, and especially the generally vague references to the localities given, prevent any comparison that might reveal geographical differences. The extent of the black markings does not seem to be correlated with size.

Prosmidia sacerdos[1] n.sp.

Figs. 7, 17, 22 H.

Colour black; head (except for gula), prothorax (except for prosternum and epimeron), 1st and 2nd antennal segments, and outer margin of last abdominal segment yellowish red; elytra yellowish red with more or less extensive black markings. Scutellum in the male also yellowish red.

Black markings on elytra normally forming two interrupted or entire transverse bands, one at about 1/4 of elytral length, the other somewhat behind the middle; suture also with black markings, at least at level of posterior transverse band, mostly also near scutellum, but sometimes extending from the scutellum almost but not quite to apex. Bands sometimes reduced to cusped spots at outer elytral margin and the sutural spot already mentioned.

[1]) *sacerdos* (Lat.) = priest, from the figure of a cross on the elytra.

Elytral punctuation strong and coarse; distance between punctures about equal to their diameter. Microsculpture fairly distinct but not strong, elytra between punctures with a stronger shine than in *P. dregei* or *P. sexplagiata;* but overall shine diminished by strong punctuation.

Male genitalia similar to those of *Prosmidia dregei,* curvature of large ostial hook resembling that in *P.d. passeti* or *P.d. suturalis.* (Fig. 22 H).

Length 8.2—10.0 mm, breadth 3.8—4.7 mm.

This species is clearly one of the *dregei* group, agreeing with the other species of that group in the structure of the pronotum, the elytral base and the scutellum. Within the group it is easily recognized by its coloration and the fairly coarse punctuation of the elytra.

Type. Holotype: ♂, Kamerun, Bamenda, 20—29.10.07, Glauning S. G., MNB.

Distribution. Cameroon highlands.

Specimens examined:

Cameroon

North-west. Bamenda, 20—29.10.07, Blauning S. G., holotype and 3 paratypes (MNB); Bamenda, Adametz S. G., 2 exx., paratypes (MNB); Bamenda, 6.12.55, Bechyné, 1 ex., paratype (MFT); Ft. de Bafut, Nguemba, 16.VIII.65, B. de Miré, 4 exx., paratypes (MNHN); Haute Nguemba, 14.8.1967, L. Matile, 1 ex., paratype (MNHN); Baliland, Museum Lübeck G., 4 exx., paratypes (MNB); Balungkom, 29.VI.05 (Balikumbat) Glauning S. G., 1 ex., paratype (MNB); Mts. Bamboutos 2000 m juillet 1939, P. Lepesme, R. Paulian, A. Villiers, 1 ex., paratype (MNHN); Mts. Bamboutos, Babadjou, 20—27.VII. —67, B. de Miré, 1 ex., paratype (MNHN); Babadjou, 12.8.1967, L. Matile, Piège lumineux, 1 ex., paratype (MNHN).

Variation. The colour variation seems to be intergrading (fig. 17). The small amount of material makes statistical analysis rather pointless, but if large numbers of specimens were available, it might be worth checking whether the size is correlated with the extent of the black markings.

Prosmidia decempunctata (Laboissière), 1926

Figs. 18 A—B, 22 I.

Idacantha decempunctata Laboissière 1926:192; Bryant 1958:42. (Type: ♂, N.W. Rhodesia, Kashitu N. of Broken Hill, XI.1914, H. C. Dollman, BMNH).

Prosmidia decempunctata (Lab.), Wilcox 1972:290.

Colour black, head (except for gula), prothorax (except for prosternum and epimeron), 1st and 2nd antennal segments, and outer margins of last abdominal segments yellow; elytra yellow with black spots. Scutellum in the male also yellow.

Each elytron with five large, rounded black spots, two situated at about 1/4 of the elytral length, two just behind the middle, and one at the apex. Outer spots either reaching the lateral margin or not, inner spots well clear of suture.

Elytral punctuation as in *P. dregei;* distance between shallow punctures much greater than their diameter. Microsculpture dense and somewhat blurred, diminishing shine of elytra.

Male genitalia similar to those of *P. dregei,* but large ostial hook with one sharp bend, otherwise almost straight. (Fig. 22 I.)

Length 9.3—11.6 mm, breadth 4.6—5.4 mm.

Type. Laboissière (1926) mentions one specimen, from BMNH, and that one is naturally the holotype.

Distribution. Known from Zambia and southern Zaire. (Fig. 2).

Specimens examined:

Zaire
Kivu. Kabambare (Lt. Delhaise) Coll. Clavareau, 1 ex. (MAC).
Shaba. Parc Nat. Upemba, Lusinga (1760 m), Mis. G. F. de Witte, 4 exx. (MAC, ISN).

Zambia
Copperbelt. Kashitu N. of Broken Hill, XI.1914, H. C. Dollman, 1 ex., holotype (BMNH).

Variation. In the small amount of material available, no important variation can be detected. The spots may be larger or smaller, but in all these specimens they are distinct. (Fig. 18 A—B).

Prosmidia sp.
Fig. 18 C—D.

Two specimens from MAC cannot at present be assigned to any species with certainty. They are from SE Zaire, and each carries a label saying »Katanga: Grande grot. de Lubudi, 1—XI—1948, N. Leleup»; both specimens are female. The structure of the pronotum is similar to that in other species of the *dregei* group. Their colour indicates that they were collected when very recently hatched, as those parts which are black in the species of the *dregei* group are brown in these two specimens, and not very dark at that (or, in the case of the scutellum, yellow). The light parts of these specimens are yellow. The elytral coloration is peculiar. In one specimen the elytra show a transverse band behind the middle, extending slightly forwards and backwards along the suture, and in the basal half each has one dorsal spot and one lateral spot (not visible from above). In the other specimen each elytron has a rather large dorsal spot and a smaller lateral spot on the basal half, and behind the middle, close to each other, a large dorsal and a large lateral spot; in addition, just behind the scutellum there is a slight darkening at the suture. Thus one of these specimens is quite similar to *P. dregei dregei,* while the other is like *P. decempunctata,* except that it lacks the apical elytral spot.

These two specimens possibly indicate that *P. decempunctata* is only a variety of *P. dregei.* On the other hand, the considerable size of the former species, and the differences found in the male genitalia argue for keeping them apart, at least until more material is obtained, especially of males, so that the genitalia can be studied.

The dimensions of these specimens are: length 9.5 and 9.8 mm, breadth 4.2 and 4.6 mm.

The *suahelorum* group

This group is characterized by the structure of the pronotum, where the hind margin of the male forms a very short, blunt, backwardly directed process, which is level with the disc, or just perceptibly elevated, but does not form a distinct knob. The pronotum is about $1^1/_2$—$1^3/_4$ times as broad as long, with its sides distinctly curved inwards; the disc is shining, with almost obliterated microsculpture. The transverse depression is distinct at the sides but obliterated in the midline, or in some females very weak in the midline, almost straight. In the central part of the disc there is a slight depression, which

is more distinct in the male than in the female; in the male the depression is normally two-headed at the posterior end, making the process at the pronotal hind margin stand out. The hind margin in the male is bordered almost to the process or a shorter way, but at least about half way to the middle; in the female it is entirely bordered, or the bordering ends at a distance more than half way to the middle, sometimes the bordering is bent at the middle, forming a triangular area.

In the male the scutellum is narrow and tongue-shaped, often slightly concave, with a rounded apex; in the female it is triangular, but rounded at the apex.

In the male the elytra are raised at the base, forming a tubercle with a sharp carina on the anterior side, falling steeply towards the pronotum, rather steeply also towards the scutellum, but the elytra are not concave here; obliquely behind the tubercle the elytra are concave in many of the specimens examined.

Only one species is recognized in this group.

Prosmidia suahelorum Weise, 1902

Figs. 19 A—D, 22 J.

Prosmidia suahelorum Weise 1902:295, 297; Weise 1904:165; Weise 1924a:23; Wilcox 1972:291. (Type, lectotype by present designation: ♂, Kwai, Paul [Weise], MNB).
Idacantha suahelorum (Wse.), Laboissière 1925a:40; Bryant 1960:355.
Prosmidia suahelorum var. *intima* Weise 1904:165; Weise 1924a:23. (Infrasubspecific)
(not) *Prosmidia suahelorum* Wse., Jacoby 1922:76 (= *Prosmidia dregei suturalis* Jac.).

Colour black; head (except for gula), prothorax (except for prosternum and epimeron), 1st and 2nd antennal segments, and outer margin of last abdominal segment yellowish — reddish; elytra yellowish — reddish with more or less extensive black markings. Scutellum in the male also yellowish — reddish.

Black markings on elytra forming a transverse band, sometimes interrupted near suture; black colour continuing posteriorly along side margin and suture, some way or (mostly) all the way round apex, enclosing a large spot of light colour. This spot, if present, normally not rounded as in *P. dregei passeti* v. *pygidialis,* but rather roundedly angular. Sometimes additional small black spots on basal half of elytra, dorsally and marginally, and

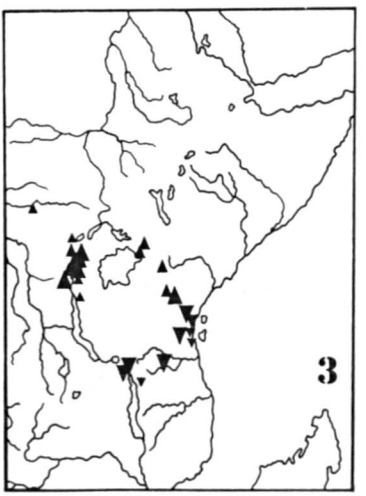

Fig. 3. Distribution of *Prosmidia suahelorum* (▼), and *P. excavata* (▲).

TABLE 7. Size variation in *P. suahelorum* colour forms and populations.

			n	length $\bar{x}$	length s	breadth $\bar{x}$	breadth s	t test (length breadth s NE	t test upper s S	t test lower right, left) i S
♂♂	typical *suahelorum*	NE	30	87.9	6.3	54.1	4.1	—	0.7	1.2
♂♂	typical *suahelorum*	S	19	86.7	5.5	53.3	3.5	0.7	—	0.5
♂♂	v. *intima*	S	30	85.9	6.3	52.4	4.2	1.6	0.8	—
♀♀	typical *suahelorum*	NE	30	88.6	7.6	53.9	4.2	—	0.5	0.8
♀♀	typical *suahelorum*	S	29	89.5	6.4	55.7	5.9	1.1	—	1.2
♀♀	v. *intima*	S	30	87.4	5.8	54.4	4.3	0.3	1.0	—

sometimes a small black apical spot when black colour does not reach apex. Anterior spots more common in specimens without black apex.

Elytral punctuation distinct and rather strong, much stronger than in *P. dregei;* distance between punctures longer than their diameter. Microsculpture indistinct, difficult to observe.

Male genitalia are closely similar to those of the preceding species group; penis somewhat more pointed at apex, spicules on sclerites of interior sac sometimes bent.

Length 7.8—10.4 mm, breadth 3.9—5.2 mm.

Types. WEISE (1902) mentions Usambara: Kwai and Sakarre as localities of this species, collected from the former by Paul Weise, from the latter by Hintz. In MNB there are many specimens with appropriate labels, and some in other museums (BMNH, RMS, MAC). I designate the specimen from MNB that carries Weise's determination label the lectotype.

Distribution. Known only from eastern and southern Tanzania. (Fig. 3).

Specimens examined:

Tanzania

Tanga. Usambara, Neu-Bethel, 16 exx. (MNB); Usambara — Ngwelo, coll. Clavareau, 3 exx.; Usambara-Berge, Sakarani, 1500 m, 30. X.—10.XI.1952, leg. Lindemann und Pavlitzki, 20 exx. (ZSM); W. Usambara, Samml. J. N. Ertl, 8 exx. (ZSM); W. Usambara, J. Buchwalds S., 1 ex. (MNB); Usambara, 5 exx. (MNB, BMNH); Usambara, coll. Oberthur, 6 exx. (MNHN); Usambara-Berge, Bumbuli, 4.XI.1952, leg. Lindemann und Pavlizki, 1 ex. (ZSM); Bumbuli, 13.XI.02,Meinhof S. G., 1 ex. (MNB); Kwai, Paul [Weise], 42 exx. including lectotype of *suahelorum* (MNB, BMNH, RMS); Kwai, coll. Clavareau, 3 exx., paratypes (MAC).

Coast. Ukami, Stuhlmann S., 1 ex. (MNB); Dar-es-Salaam, Paul [Weise], 1 ex. (MNB).

Morogoro. Nord-Uluguru, 1400—1900 m, Febr. 14, leg.Methner, 1 ex. (MNB); Terr. Bunduki, Uluguru Mts., moy. Mgeta, 1300 m, 30—IV/11—V—1957, P. Basilewsky & N. Leleup, 11 exx. (MAC); Uluguru-Berge, Ostseite, Urwald, III.1963, E. Haaf 1 ex. (MFT); Bunduki, W. Uluguru, ca 1300 m, XI.11, 1 ex. (MNB).

Iringa. Uhehe, Iringa, Götze S., 41 exx. (MNB); Uheheland, Kidugala, 1 ex. (MNB); Iringa, Ertl, 2 exx. (MNB, ZSM).

Mbeya. Manow, 11 exx. (MNB, MNHN, MAC); Langenburg (= Tukayu), Dr. Kempner, 2 exx. (MNB); Tukuyu, 5084 ft., 10.IV.24, N. C. E. Miller, 1 ex. (BMNH); Ubena — Langenburg, IV.99, Götze S., 11 exx. (MNB); Unyika — Bogo Bg., 17.XI.99, W. Goetze S., 21 exx. (MNB); Rungwe-Berge, 2500 m, I.1963, leg. E. Haaf, 43 exx. (MFT); Rungwe-Mission, 1600 m, I.1963, leg. E. Haaf, 22 exx. (MFT); N. Nyassa-See, Massewe — Kiwira-Fl., 25.XI.99, Goetze S., 5 exx. (MNB).

Ruvuma. Kigonsera, ex Staudinger, 1 ex. (MAC).

Dtsch O. Africa, 1 ex. (MNHN); Nyassa, 5 exx. (MNB).

Variation. The two main colour types have been given their own names, the one with a dark elytral apex (Fig. 19 D) being the typical *suahelorum* and the one in which the black colour does not extend to the apex (Fig. 19 A—C) being called var. *intima*. In different parts of the range these colour forms occur in different proportions. Almost all the material from NE Tanzania is of the typical form (I have seen only three specimen of v. *intima* from there) while in southern Tanzania 42 % of the specimens examined are typical *suahelorum* and 58 % v. *intima*.

The size statistics are given in table 7. The test gives no reason for dividing *P. suahelorum* into subspecific categories, and although the different proportions of the typical form and var. *intima* in the southern and northern populations is striking, that in itself hardly suffices for such an action.

The *excavata* group

This group is characterized by the pronotum, which in the male has a very distinct, kidney-shaped excavation. The pronotum is about $1^1/_2$—$1^3/_4$ times as broad as long, its sides are distinctly concave behind the middle, the disc is shining, but often carrying a distinct, though rather weak, microsculpture. The transverse depression is distinct at the sides, obliterated or in some females very weak in the middle. Just behind the middle the male exhibits a kidney-shaped or sometimes more heart-shaped excavation that reaches almost to the hind margin, the concave border of the excavation is posterior. In the female this excavation is represented only by a slight depression without defined borders. The hind margin in the male is bordered to the level at which the excavation approaches the margin, the area in between being unbordered; in the female the entire hind margin is bordered, although the bordering may be rather weak in the midline. At those places where the excavation approaches the hind margin in the male the area between the excavation and the margin does not reach the level of the disc, while the portion lying in the middle reaches that level, and thus appears to be raised.

In the male the scutellum is tongue-shaped, rather broad, often somewhat concave, and broadly rounded at the apex; in the female it is triangular, rounded at the apex.

The elytra in the male are slightly raised at the base, forming three tubercles that fall steeply towards the pronotum and scutellum.

Only one species is recognized in this group.

Prosmidia excavata (Weise), 1909

Figs. 19 E—G, 22 K.

Idacantha excavata Weise 1909:196, Taf. 4, fig. 7; Laboissière 1921:66; Laboissière 1925a:40; Laboissière 1940a:14. (Type, lectotype by present designation: ♂ Kilimanjaro, Sjöstedt, Meru Regenwald, jan., RMS).

Prosmidia excavata (Wse.), Weise 1924a:22; Wilcox 1972:290.

Diacantha nigronotata Gahan 1909:219, Pl. 7, fig. 3, 4. (Type, lectotype by present designation: ♂, Ruwenzori, Scott Elliot, 7—8000 ft. 95—41 *Diacantha nigropunctata* (sic) Gahan, BMNH).

Prosmidia nigronotata (Gah.), Weise 1924a:23.

Idacantha excavata var. *nigronotata* (Gah.), Laboissière 1921:67; Laboissière 1925a:40; Laboissière 1940a:14.

Colour black; head (except for gula), prothorax (except for prosternum and epimeron), 1st—3rd antennal segments and outermost margin of last abdominal segment reddish yellow, elytra reddish yellow with more or less extensive black markings. Scutellum in

the male also reddish yellow. Outer segments of antennae sometimes brown rather than black.

Elytral coloration of two different forms. The commoner type with black colour forming a transverse band just behind the middle, continuing back along the suture and side margins right round the apex, thus enclosing a large yellowish spot, which may be rounded or slightly angular; anteriorly each elytron with one dorsal and one marginal small black spot. Only a few specimens are entirely without these anterior spots. Black coloration usually also extending from transverse band a bit towards base along suture and side margins. Some specimens with additional black spots on basal half at suture. Rarer colour type with black colour extending rather narrowly along suture, and somewhat more broadly along side margin; apex yellowish; basal half with dorsal and marginal black spots.

Punctuation of elytra fine, distance between punctures much greater than their diameter; elytra shining, with fine, distinct microsculpture.

Male genitalia rather like those of the *dregei* group. Penis comparatively short and broad, moderately pointed at apex. Internal sac with conspicuously short spicules, other sclerites similar to those in the *dregei* group.

Length 6.5—9.3 mm, breadth 3.4—4.6 mm.

Types. Weise (1909) described *Idacantha excavata* from material collected by the Sjöstedt expedition. This material is now mainly in RMS, with some specimens in MNB and MNHN. I have chosen a male specimen from RMS, carrying the labels Kilimanjaro, Sjöstedt, Meru Regenwald, jan, *Idacantha excavata,* and designate it the lectotype.

Gahan (1909) described *Diacantha nigronotata* from a number of specimens from Ruwenzori. These specimens are in BMNH and MAC, mostly with cotype labels. Two specimens in BMNH, a male and a female, are labelled »Type». Of these I choose the male specimen, and designate it the lectotype. The labels bear the information: Ruwenzori, Scott Elliot, 7—8000 ft. 95—41, *Diacantha nigropunctata* Gahan, Type ♂.

Distribution. North-eastern Zaire, Rwanda, Burundi and western Uganda; Kenya Highlands and mountains in northern Tanzania. (Fig. 3).

Specimens examined:

Zaire

Haut-Zaire. Uele: Dingila, VI—1933, H. J. Brédo, 1 ex. (MAC); Ituri: Bunia, 1938, P. Lefèvre, 1 ex. (MAC).

Kivu. Beni, Lt. Borgerhoff, 1 ex. (MAC); Beni à Lesse, fin VII—1911, Dr. Murtula, 1 ex. (MAC); Butembo, 19—V—1939, Alb. Dufrasne, 1 ex. (MAC); Butembo, IX/X—1965, Rév. P. Cèlis, 1 ex. (MAC); N. Lac Kivu: Rwankwi, XI—1947, J. V. Leroy, 1 ex. (MAC); Region des Lacs, Dr. Sagona, 2 exx. (MAC); Lulenga, 8—XI—1925, Dr. H. Schouteden, 1 ex. (MAC); Kibati, 5—XI—1925, Dr. H. Schouteden, 2 exx. (MAC); Mokoto, G. Babault, 30 exx. (MNHN); Kadjudju, G. Babault, 5 exx. (MNHN); Parc Nat. Albert (= P. N. Kivu), G. F. de Witte, many localities — see Laboissière 1940a, 10 exx. (MAC); Kashusa, 1937, F. Vandelannoite, 3 exx. (MAC); Ibanda, 1952, F. Vandelannoite, 1 ex. (MAC); Itombwe, 2300 m, Mulenge, Nyalengwe, X—59, B.115A, N. Leleup, Humus en forêt, 3 exx. (MAC); Bukima, IV—1948, V. Leroy, 3 exx. (MAC); Costermansville (= Bukavu), 25—II—1937, H. J. Brédo, 1 ex. (MAC); Costermansville, 1948, P. H. Vercammen, 2 exx. (MAC); Katana, X—1932, L. Burgeon, 1 ex. (MAC); Mulungu, V—1935, J. V. Leroy, 8 exx. (MAC); Mulungu, 1938, Hendrickx, 9 exx. (MAC); Mulungu: Tshibinda, XI—1951, P. C. Lefèvre, 33 exx. (MAC); Tshibinda, XI—1932, L. Burgeon, 1 ex. (MAC); Mulungu (Tshibinda), 1956, J. Hecq, 4 exx. (MAC); Tshibinda, 1955, J. Hecq, 4 exx. (MAC).

Rwanda

Kibungu, X—XII—1937, R. Verhulst, 2 exx. (MAC); Parc Nat. Albert (= P.N. Volcans), G. F. de Witte, several localities — see LABOISSIÈRE 1940a, 4 exx. (MAC); Katumba, 1500/1800 m, XI—1951, A. E. Bertrand, 1 ex. (MAC); German E. Af., Ruanda Distr., Dr. C. H. Marshall, 1912, 1 ex. (BMNH).

Burundi

Bururi, ex coll. Breuning, 1 ex. (MAC).

Uganda

Western. Ruwenzori, Scott Elliot, 7—8000 ft., 2 exx., lectotype and paralectotype of *nigronotata* (BMNH); Ruwenzori, Scott Elliot, 5300 ft., 1 ex., paralectotype of *nigronotata* (BMNH); Ruwenzori, Scott Elliot, 9000 ft., 1 ex., paralectotype of *nigronotata* (BMNH); E. Ruwenzori, 6—13000 ft., 1906, Hon. G. Legge & A. Fr. Wollaston, 29 exx., including paralectotypes of *nigronotata* (MAC, BMNH); Old Camp, E. Ruwenzori, 6—7000 ft., 1906, Hon. G. Legge & A. Fr. Wollaston, 3 exx. including paralectotypes of *nigronotata* (MAC); Mubuki River, S. E. Ruwenzori, 1906, Hon. G. Legge & A. Fr. Wollaston, 4 exx., including paralectotypes of *nigronotata* (MAC, BMNH); Mpanga Forest, Toro, 4800 ft., 13—23.Nov.1911, S. A. Neave, 2 exx. (BMNH); Kagera, June 1911, C. H. Marshall, 1 ex. (BMNH); Kigezi Dist., 28.XI.1934, Mt. Sabinio, 7000 ft., J. Ford, 1 ex. (BMNH); Uganda, Bamboo Forest, May 1911, C. H. Marshall, 1 ex. (BMNH).

Kenya

Nyanza. Yala R., S. edge Bakumga Forest, 4800—5300 ft., May 21—28, 1911, S. A. Neave, 4 exx. (BMNH); Tiriki, N. Kavirondo, 5200 ft., May 20, 1911, S. A. Neave, 1 ex. (BMNH).

Rift Valley. Nandi Escarpment (Forest), 5800 ft., May 29, 1911, S. A. Neave, 2 exx. (BMNH).

Central. Rogoro, Kikuyu Forest, 29.X. to 14.XII.1899, C. S. Betton, 1 ex. (BMNH); Kikuyu Escarp., Kijabe to Limoru, 6800—7400 ft., Mch. 6—10, 1911, S. A. Neave, 1 ex. (BMNH).

Br.O.Afr., Lovén, 2000 m, juli, 1 ex. (RMS).

Tanzania

Kilimanjaro. Kilimandjaro versant sud-est, Zone des cultures, Moschi, 1120 m, Alluaud & Jeannel, Mars—Avril 1912, St. 68, 1 ex. (MNHN); Kilimandjaro versant sud-est, Zone des cultures, Kiléma, 1440 m, Alluaud & Jeannel, Mars 1912, St. 67, 2 exx. (MNHN); Kilimanjaro, Madschame, 2 exx. (MNB); Kilimandjaro vers. O. (Buchberger), ex coll. Breuning, 1 ex. (MAC).

Arusha. Kilimanjaro, Sjöstedt, Meru, Regenwald, jan., 7 exx., lectotype and paralectotypes of *excavata* (RMS); Kilimanjaro, Sjöstedt, Meru, 3000 m, jan., 8 exx., paralectotypes of *excavata* (RMS, MNB, MNHN).

Variation. Of the two colour forms, the one with a transverse band on the elytra (Fig. 19 E, G) is the typical *excavata,* and the one lacking it (Fig. 19 F) was described

TABLE 8. Size variation in *P. excavata* colour forms.

		n	length $\bar{x}$	length s	breadth $\bar{x}$	breadth s
♂♂	typical *excavata*	30	75.1	6.2	47.2	4.1
	v. *nigronotata*	26	75.6	6.7	47.5	4.9
♀♀	typical *excavata*	30	74.8	6.4	47.7	4.8
	v. *nigronotata*	16	78.1	7.7	48.6	3.6

as *nigronotata.* In the entire material studied 76 % are of the typical form and 24 % of var. *nigronotata.* The majority of var. *nigronotata* are from eastern Ruwenzori, but the small number of specimens collected from most localities makes it impossible to draw confident conclusions about the respective distribution of the forms. The small amount of material from the eastern area also prevents a statistical comparison of the eastern and western populations.

The size statistics are given in table 8. Analysis of these statistics by the t test yields the following results: ♂ length 0.3, breadth 0.3, ♀ length 1.5, breadth 0.7. Obviously the two colour forms exhibit very little difference in dimensions.

The *chevrolati* group

The species of this group are characterized by the pronotum, which in the male bears a conspicuous elevation along the mid-line in the posterior half, extending to the hind margin, which is modified. The pronotum is about 1 1/2—1 3/4 times as broad as long; its sides are distinctly — barely perceptibly concave behind the middle; the disc is shining, without observable microsculpture. The transverse depression is distinct at the sides, but medially entirely (♂) or almost entirely (♀) obliterated, in the female the depression curves towards the pronotal hind margin near the mid-line. In the male the pronotum is raised behind the mid-point as a callus-like elevation, which slopes gently to the disc on all sides without sharp borders; the area at the hind margin where this elevation continues is raised above the hind margin elsewhere, forming a very short process. In the female the hind margin is entirely bordered, in the male it is bordered at the sides.

In the male the scutellum is tongue-shaped or triangular, in the female it is triangular, blunt or rounded at the apex.

The male elytra are slightly raised at the base, falling steeply towards the pronotum and rather steeply towards the scutellum, with or without an anteriorly directed tubercle.

Three species are recognized in this group.

Prosmidia chevrolati[1] (Guérin-Méneville), 1849

Figs. 20 A—B, 23 A.

Diacantha chevrolatii Guérin-Méneville 1849:330, Pl. V, f. 10. (Type: ♂, Abyssinie, Ex Musaeo Guér.-Ménev., coll. Allard, MNHN).
Diacantha chevrolati Guér., Jacoby 1891:40.
Prosmidia chevrolati (Guér.), Weise 1924a:22; Wilcox 1972:289.
Idacantha chevrolati (Guér.), Laboissière 1925a:40.
Laetiacantha chevrolati (Guér.), Laboissière 1929a:326.
Diacantha lacordairei Chapuis 1879:17; Allard 1888:318, 323. (Type, lectotype by present designation: ♂, Scioa, Mahal-Uonz, VII.1877, Antinori, coll. Chapuis, ISN).
Prosmidia lacordairei (Chap.), Weise 1903:39; Weise 1924a:22 (syn. of *chevrolati* Guér.).
(not) *Diacantha chevrolati* Guér., Allard 1888:317, 323.

Colour brownish yellow, underside black; of head only gula, of prothorax only prosternum and epimeron black; legs black; antennae from 3rd segment piceous, 1st and 2nd

[1]) I am well aware that the name, originally written, ended in *-ii.* Since, however, the matter of these endings recently has been brought before the International Commission on Zoological Nomenclature (Smith, Stuart & Conant 1971 and Lemche 1971) I retain the form ending in *-i,* which has been used in all references except for the original description, and which is the grammatically correct one. If the commission does not approve the request, the name will have to be written *chevrolatii.*

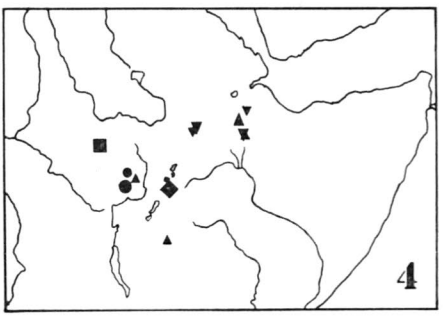

FIG. 4. Distribution of *Prosmidia chevrolati* (▼), *P. zavattarii* (▲), *P. semifasciata* (■), *P. marginata* (●) and *P. prasina* (◆).

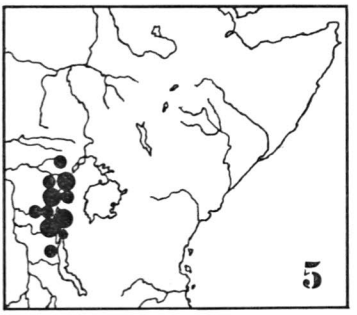

FIG. 5. Distribution of *Prosmidia vicina.*

brownish yellow. Pronotum often with two small rounded black spots close to each other on disc, elytra with two elongated black spots at side margin, and sometimes with two rounded black spots dorsally, one at about 1/4 of the length, the other a bit behind the middle. Scutellum in the female at least basally black.

Pronotum in the male with hind margin forming above the scutellum a very short, elevated process, which is evenly rounded, without additional tubercles. Scutellum in the male narrow and tongue-shaped, rounded at apex. Elytra strongly and rather densely punctuated, distance between punctures about equal to their diameter. Microsculpture between punctures very indistinct. Basal area in the male slightly elevated, with a very blunt tubercle anteriorly.

Length 8.2—9.9 mm, breath 4.0—4.6 mm.

Male genitalia: Penis blunt at apex, with a comparatively large ostium. Large ostial sclerite moderately curved, spicules rather long.

Types. When GUÉRIN-MENEVILLE (1849) described *Diacantha chevrolatii,* he mentioned neither locality nor number of specimens. In MNHN there is only one specimen, a male, labelled »voy. Lefebvre, ex Musaeo Guér.-Ménev., Abyssinie», and I designate it the lectotype. CHAPUIS (1879) likewise did not mention the number of specimens, but the information he gave, i.e. Scioa, Mahal Uonz, July, M. Antinori, is found in only one specimen seen by me, a male from ISN, which I designate lectotype of *lacordarei.*

I do not know what ALLARD (1888) meant by *Diacantha chevrolati* Guér. The description may refer to *Laetiacantha elegans* Lab., in which case the distribution, which is given as »Abyssinie», is wrong for the species studied by Allard.

Distribution. Ethiopia (eastern highlands). (Fig. 4).

Specimens examined:

Ethiopia

Shoa. Scioa, Mahal-Uonz, VII 1877, Antinori, coll. Chapuis, *Diacantha Lacordairei,* lectotype, 1 ex. (ISN); Scioa, Let Marefia, IV—VII 1881, Antinori, coll. Duvivier, *Diacantha Lacordairei* type, 1 ex. (ISN) (not type); Scioa, Let Marefia, I—II 1880, Antinori, coll. Clavareau, 1 ex. (MAC); Scioa, Let Marefia, VIII—87, Ragazzi, 2 exx. (MAC, MCG); Scioa, Assachion Ag., Ragazzi, 1885, 1 ex. (MCG).

Harar. Hadda Galla, Dainbi, Antinori 1879, Jacoby Coll. (BMNH); Harrar, Abessyn., 3 exx. (MNB).

Abyss., voy. Lefebvre, Ex Musaeo Guér.-Mén., 1 ex., lectotype of *chevrolati* (MNHN); Abyssinie, A. Raffray, Voy. 1881, 1 ex. (MNHN).

Variation. In coloration, there exist specimens with dorsal spots on pronotum and elytra (as in the type of *chevrolati),* and specimens lacking these spots (as in the type of *lacordarei).* The small amount of material makes a statistical study of the proportions meaningless. The same goes for the dimensions.

Prosmidia zavattarii (Laboissière), 1938 new combination

Figs. 20 C—F, 23 B.

Laetiacantha zavattarii Laboissière 1938:139; Wilcox 1972:294; Silfverberg 1972:46. (Type: ♂, Miss. E. Zavattari dei Borana, A. O. I., Arero, Aprile 1937, MCT).
Laetiacantha zavattarii var. *decora* Laboissière 1938:141. (Infrasubspecific).

Colour black, of head only occiput yellowish, pronotum sometimes with two small yellowish — reddish spots at hind margin, 1st and 2nd antennal segments yellowish, and elytra brownish yellow, with or without black markings. One specimen with basal antennal segments also largely blackish, another with antennae piceous rather than black.

Black markings on elytra forming, in the specimen in which they are best developed, two oblique transverse bands, connected by narrow stripes along suture and sublaterally; posterior band more oblique, at about 2/3rds of the length of the elytra, anterior band at about 1/4 of the length. Black colour continuing along suture to scutellum. Each elytron with a small diffuse black spot subapically. In other specimens elytra without black markings. Intermediate forms with black elytral markings reduced.

Hind margin of pronotum in the male forming above the scutellum a short, elevated process, having on each side a small but distinct tubercle. Scutellum in the male narrowly triangular, only slightly rounded at apex. Elytral punctuation and microsculpture similar to that of preceding species.

Male genitalia: Penis rather blunt at apex, with comparatively small ostium. Large ostial sclerite less curved, bent at one place, spicules comparatively short.

Length 8.3—9.8 mm, breadth 4.0—4.6 mm.

Types. In his description Laboissière (1938) mentions a male specimen from Arero in such a way that, although he did not say so explicitly, he clearly considered it the holotype. This specimen is in MCT, and carries a type label. The other two specimens mentioned at the same time, both of them female, and both nowadays in ZMH, are to be considered paratypes, although they carry similar type labels.

Distribution. Ethiopia (fig. 4). Laboissiere (1938) mentions one specimen from »Région du Tanganyka» from his own collection, and this specimen was discovered in ZMH. It carries a label »Tanganika, D.O.A.», and it is unquestionably this species. However, unless further material is found, I prefer to consider the specimen mislabelled.

Specimens examined:

Ethiopia
Harar. Dire Daoua, Abessyn., 2 exx., 1 paratype of *zavattarii* and type of v. *decora* (ZMH, MNB); Harrar, Abessyn., coll. Oberthur, 1 ex. (MNHN).
Sidamo. Arero, Aprile 1937, Miss. E. Zavattari nei Borana A. O. I., holotype of *zavattarii,* 1 ex. (MCT).
Kaffa. Mt. Maigudo, 16—17.6.1973, R. Linnavuori, 1 ex. (MZH).
Tanganika D.O.A., paratype of *zavattarii,* 1 ex. (ZMH).

Variation. For the colour variation between typical *zavattarii* with entirely yellow

elytra, and the form in which the black markings are best developed (var. *decora),* see fig. 20 C—F. For further studies of the variation more material is needed.

Prosmidia semifasciata n.sp.
Figs. 8, 23 C.

Colour testaceous, elytra with several black markings, consisting of black bordering of suture from scutellum to behind middle, two black bands extending from side margin not quite to sutural bordering, and a roundedly angular spot subapically. Anterior band at about 1/4 of elytral length, and curving basally near side margin; posterior band at about 2/3 of elytral length, curving somewhat towards apex at side margin, and somewhat more dorsally with a forwardly directed cusp.

Hind margin of pronotum similar to that of preceding species. Scutellum in the male not quite so narrowly triangular, sharp at apex. Elytral punctuation similar to that of preceding species, microsculpture not noticeable. Base of elytra in the male with a distinct, rather sharp tubercle.

Male genitalia: Penis blunt at apex, ostium comparatively small. Large ostial hook moderately curved; spicules rather long.

Length 9.6 mm, breadth 5.5 mm.

♀ unknown.

This is a very distinct species, immediately recognizable by its coloration and broad shape. The structure of the male pronotum, as well as the genitalia, show that it is one of the *chevrolati* group.

Type. Holotype, ♂, Abessinien 1938, Prov. Wallega, F. B. Neuhaus, Jubdo Bir-Bir, 1400 m, V—VI, ZSM.

Distribution. Ethiopia, Wollega. (Fig. 4). Known only from the holotype.

The *marginata* group

This group is characterized by the pronotum, which in the male is modified only insofar as the hind margin is unbordered except at the very angles, slightly raised, just before the hind margin on each side with a slight depression, so that a suggestion of an oblique carina is formed. The pronotum is about 1 3/4 times as broad as long, its sides are distinctly concave behind the middle; the disc is shining, without or with weak microsculpture. The transverse depression is distinct at the sides, in the male almost or entirely obliterated in the middle, in the female weaker in the middle. The hind margin is bordered in the female all the way, or unbordered in the middle.

The scutellum is triangular, in the male with concave sides; the apex is broadly rounded in the female.

The male elytra are raised at the base, without any tubercle, steep towards the pronotum, more sloping towards the scutellum, with a small rounded pit on the scutellar slope. Elytra carrying dispersed, moderately long hairs mostly on the sides, but in the apical half even close to the suture.

Only one species is recognized in this group.

Prosmidia marginata Silfverberg, 1972
Fig. 23 D.

Prosmidia marginata Silfverberg 1972:44. (Type: ♂, Ethiopia, Belleta Forest, R. Linnavuori 13—14.6.1963, MZH).

Colour black, head, prothorax (except for prosternum), and antennae (or at least basal segments) yellow. Elytra black with bluish sheen, along suture and side margins rather broadly reddish yellow, with a more or less extensive yellowish area basally (larger in the male than in the female). Scutellum in the male brownish yellow. Two of the specimens studied with legs also yellow.

Elytral punctuation strong and rather dense, sometimes irregular; distance between punctures about equal to their diameter, or even smaller. Elytra shining, with no observable microsculpture.

Male genitalia: Penis is rather blunt at apex, ostium comparatively large. Large ostial sclerite strongly curved; spicules quite long.

Length 6.5—8.2 mm, breadth 3.2—4.5 mm.

Types. Holotype and five paratypes in MZH.

Distribution. Ethiopia (Kaffa). (Fig. 4).

Specimens examined:

Ethiopia
Kaffa. Belleta Forest, 13—14.6.1963, R. Linnavuori, 5 exx. — holotype and 4 paratypes — (MZH); Gembi near Agaro, 15.6.1963, R. Linnavuori, 1 ex., paratype (MZH).

The *prasina* group

This group is characterized by the pronotum, which is about 1 3/4 times as broad as long, its sides distinctly concave behind the middle; side margins are broadly bordered, hind margin bordered in the male about 2/3rds of the way to the middle, the central part is unbordered but not otherwise modified. The pronotal disc has a dense microsculpture, which diminishes the shine. The transverse depression is distinct at the sides, obliterated in the male in the middle; from the mid-point to the hind margin there is a slight elevation, a slight depression on each side of it.

The scutellum in the male is triangular, with strongly concave sides.

The elytra are strongly raised at the base in the male, forming a distinct tubercle with steep sides to both the pronotum and the scutellum. From the tubercle the highest part of the elytra runs to the suture at about 1/3rd of the elytral length, the scutellar area thus forming a triangular depression. The elytra carry rather long, sparse hairs, mostly on the sides, but some near the suture, even before the middle.

Only one species is recognized in this group.

Prosmidia prasina Silfverberg, 1972
Fig. 23 E.

Prosmidia prasina Silfverberg 1972:43. (Type: ♂, Ethiopia, Shashamanni, Linnavuori, 6—7.6.1963, MZH).

Colour black, upper side of head, pronotal margins and antennae yellowish red, antennae darkening towards apex; pronotal margins diffusely limited; elytra dark metallic green; epipleura and extreme outer margin at apex, and scutellar tubercle in the male reddish yellow.

Elytral punctuation strong and dense, rather irregular; distance between punctures mostly equal to or smaller than their diameter. Only very weak microsculpture can be observed.

Male genitalia: Penis slightly pointed, ostium small. Large ostial sclerite distinctly, although not very strongly, curved; spicules comparatively long.

Length 7.6 mm, breadth 3.9 mm.

♀ unknown.

Types. Holotype in MZH.

Distribution. Ethiopia. (Fig. 4). Known only from the holotype.

Specimens examined:

Ethiopia
Arussi. Shashamanni, 6—7.6.1963, R. Linnavuori, 1 ex., holotype (MZH).

Subgenus **Paracanthina** Hincks

This subgenus comes close to *Idacanthina,* but exhibits a number of characters that seem, at least to me, sufficient for keeping it separate. The pronotum has a strong transverse depression, which is only slightly weaker in the middle, even in the male; the hind margin is bordered almost to the middle; in the male at the hind margin there is a short, longitudinal carina drawn out into an acute process directed posteriorly; at the anterior end this longitudinal carina fuses with two oblique carinae, the area between the hind margin and these oblique carinae being distinctly concave. In some male specimens the central part of the disc is slightly depressed.

The scutellum is triangular, in the male often with slightly concave sides, in the female rounded at the apex.

The elytra have a very strongly impressed, coarse punctuation; in the basal area in the male the punctuation is fine. The basal area in the male is strongly raised, with a distinct tubercle anteriorly, falling steeply towards the pronotum, and rather steeply towards the scutellum.

The male genitalia are longer than in the subgenus *Idacanthina,* the penis is evenly rounded up to the sharp apex, and the ostium is large. The large ostial sclerite is straight in the basal half, then slightly curved.

Only one species is recognized in this subgenus.

Prosmidia vicina (Gahan), 1909
Figs. 21, 23 F.

Diacantha vicina Gahan 1909:219. (Type: ♂, Old Camp, E. Ruwenzori, 6—7000 ft., 1906, Coll. by Hon. G. Legge & A. F. R. Wollaston, BMNH).
Paracantha vicina (Gah.), Laboissière 1921:73; Laboissière 1925a:40; Laboissière 1940a:14.
Prosmidia vicina (Gah.), Weise 1924a:23.
Paracanthina vicina (Gah.), Wilcox 1972:295.
Idacantha multicolor Weise 1912:141. (Type, lectotype by present designation: ♂, Nördl. v. Alb. Edw. See, Ruwensori Westseite, 2500 m, 2.08, Exped.: Herzog Adolf Friedrich z.Mecklenburg, J. Weise det., 95854, MNB).
Paracantha multicolor (Wse.), Laboissière 1921:71; Laboissière 1925a:40.
Prosmidia multicolor (Wse.), Weise 1924a:22.
Paracanthina multicolor (Wse.), Hincks 1949:619.
Paracantha vicina multicolor (Wse.), Laboissière 1940a:14; Bryant 1956:404.
Paracanthina vicina multicolor (Wse.), Wilcox 1972:295.
Paracantha multicolor var. *ugandensis* Laboissière 1921:72; Laboissière 1925a:40. (Type: ♀, Uganda, Fort Portal, Dr. Bayer, MAC).

Paracantha multicolor var. *fulvicollis* LABOISSIÈRE 1923:208; LABOISSIÈRE 1925a:40. (Infrasubspecific).
Paracantha vicina var. *fulvicollis* Lab., LABOISSIÈRE 1940a:15; BRYANT 1956:404.
Paracantha vicina var. *rufa* LABOISSIÈRE 1923:208; LABOISSIÈRE 1925a:40. (Infrasubspecific).
Prosmidia vicina ab. *initialis* WEISE 1924b:10. (Infrasubspecific).
Paracantha vicina ab. *initialis* (Wse.), LABOISSIÈRE 1925a:40.
Paracantha vicina var. *mirabilis* LABOISSIÈRE 1940:303; BRYANT 1956:404. (Infrasubspecific).

Colour black; of head at least occiput, of antennae at least 1st and 2nd segments yellowish red; sometimes entire head, except for gula, and entire prothorax, except for prosternum and epimeron, reddish; red colour sometimes extending in antennae as far as 5th segment. Pronotum, when black, often with red spots, when red, often with black spots. Elytral coloration of three main types: one having elytra entirely red, with, especially in male, usually a lighter basal spot; another having reddish elytra with a lattice-like pattern of black transverse and longitudinal bands; the third with elytra black, in the male with a large red spot at the base; black colour of elytra usually with a bluish or greenish sheen, red colour sometimes brownish rather than red. See also variation.

Elytra coarsely punctuated; distance between punctures much smaller than their diameter; usually with a weak but distinct microsculpture between the punctures.

Male genitalia (fig. 23 F) characterized already under the subgenus.

Length 8.0—9.8 mm, breadth 4.0—4.9 mm.

Types. GAHAN (1909) described *Diacantha vicina* from a single specimen collected in Mubuku Valley, Ruwenzori. This specimen, the holotype, is in BMNH, and has a type label, and a label »Old Camp, Ruwenzori, 6—7000 ft.». WEISE (1912) did not state how many specimens his description of *Idacantha multicolor* is based upon, and in MNB there are 11 specimens from the type locality (»Ruwensori Westseite») carrying type labels. All the specimens also carry a label referring to the expedition (»Exped.: Herzog Adolf Friedrich z.Mecklenburg»), a label saying »J. Weise det.», and the number 95854. I choose a ♂ specimen carrying besides these, a small handwritten label with the number 78, and designate it the lectotype.

LABOISSIÈRE (1921) described *Paracantha multicolor* var. *ugandensis* from a single specimen, a ♀ from Fort Portal, Uganda, collected by Dr. Bayer. This specimen, already labelled holotype, and carrying, besides the label mentioning locality and collector, a determination label of Laboissière, giving the name, is deposited in MAC. Since Laboissière gave this variety a name referring to an origin different from the nominate form, the variety is in this case to be considered subspecific. The other varieties described by Laboissière and Weise are infrasubspecific.

Distribution.Easternmost Zaire, westernmost Uganda, Rwanda and Burundi. (Fig. 5, p. 37).

Specimens examined:

Zaire

Haut-Zaire. Mongbwalu (Kilo), 1937, Mme Scheitz, 2 exx. (MAC); Mongbwalu, VII—1938, Mme Scheitz, 2 exx. (MAC); Mongbwalu, Mme A. Lepersonne, 18 exx. (MAC); Ituri: Lubero, X—1928, Mme Van Riel, 1 ex. (MAC); Lubero, 21/24—VIII—1932, L. Burgeon, 1 ex. (MAC); Mombasa (= Mambasa), 36 km sud Lubero, VIII—1932, 1 ex. (MAC); Ituri: Lekwa (For. Djugu), 2.XI.1952, J. Hecq, 1 ex. (MAC); Kibali-Ituri: Nioka, V—1952, J. Hecq, 1 ex. (MAC).

Kivu. Beni, Lt. Borgerhoff, 2 exx. (MAC); Nördl. v. Alb. Edw. See, Ruwensori West-

seite, 2500 m, 2.08, Exped. Herzog Adolf Friedrich z.Mecklenburg, 8 exx., lectotype and paralectotypes of *multicolor* (MNB); N. Alb. Edw. See, Ru-Nssoro, 2500 m, 9.VI.91, Stuhlmann S., 1 ex. (MNB); Nördl. v. Alb. Edw. See, Ruwensori Fuss, Westseite, 2.08, Exped.: Herzog Adolf Friedrich z.Mecklenburg, 2 exx., paralectotypes of *multicolor* (MNB); Ruwenzori, Kalonge (2050 m), 6/11 VIII—1932, L. Burgeon, 5 exx. (MAC); Ruwenzori: 22—XI—31, vall. Butagu (2000 m), Mme L. Lebrun, 3 exx. (MAC); Rwenkere, III—1928, Ch. Seydel, 1 ex. (MAC); Mts. Nyamakubi (2600 m), XI—1932, L. Burgeon, 2 exx. (MAC); N. E. Gando (2400 m) (Kihirwe à Ilega), VI—1935, de Witte, Parc Nat. Albert (= P. N. Kivu), 1 ex. (MAC); La Mutura, Burunga, III—1928, Ch. Seydel, 4 exx. (MAC); Terr. Walikale, Kasindi, 5.IX.1962, Dr. R. Kiss, 3 exx. (MAC); Bitale, 1800 m, 15—VIII—52, R. Mayné, 14 exx. (MAC); Mont Biega, 19—VIII—1952, R. Mayné, 1 ex. (MAC); Terr. Masisi, Lac Lukulu, 1800 m, N. Leleup, VI—1959, Biot.No 88, Humus en forêt, 1 ex. (MAC); Ibanda, 1935, Vandelannoite, 1 ex. (MAC); Mulungu, V—1935, J. V. Leroy, 1 ex. (MAC); Mulungu, 1938, Hendrickx, 1 ex. (MAC); Mulungu,1939, Hendrickx, 1 ex. (MAC); Mulungu — Tshibinda, XI.1951, P. C. Lefèvre, 1 ex. (MAC); Tshibinda, XI—1932, L. Burgeon, 30 exx., including type of var. *mirabilis* Lab. (MAC); Tshaya, G. Babault, 1 ex. (MNHN); Terr. Kabare, contref. S. E. Kahuzi, 2080—2200 m, 7.VIII.—51, N. Leleup, 1 ex. (MAC); contref. S. Kahuzi, km 27, 2200 m, 28.III.—53, P. Basilewsky, 9 exx. (MAC); Kitembo, G. Babault, 6 exx. (MNHN); Lwiro, VIII.1959, 7000, P. J. Curtis, 1 ex. (BMNH); Ins. Kwidjwi (Kivu-See), 9.07, Exped.: Herzog Adolf Friedrich zu Mecklenburg, 1 ex. (MNB); Kiwu-S., Ins. Kwidjwi, Grauer S. V., 4 exx. (MNB); Tête de la source de la Bukundji, terr. Mwenga, N. Leleup, II—1957, Altitude 2250 m, 2 exx. (MAC); Bukima, IV—1948, J. V. Leroy, 8 exx. (MAC); Mt. Bukulamissa, alt. 2300 m, 21.I.1957, J. Hecq, 1 ex. (MAC); Kavumu à Kabunga km 82 (Mingazi), H. Bomans, 2 exx. (MAC); Nyongwe, 2000 m, Forêt Rugege, VIII—49, Dr. R. Laurent, 1 ex. (MAC); Kadjudju, Guy Babault, 25 exx. (MNHN); Lac Kivu W.: Bulira, XI—1932, Guy Babault, 1 ex. (MAC); Rugari, 1937, R. P. Feyes, 1 ex. (MAC); Bigoga, II—1923, Forêt de Bambous, R. Van Saceghem, 1 ex. (MAC); Terr. Uvira, Lac Lungwe, G. Marlier, 1 ex. (MAC).

Shaba. Mont Kabobo, terr. Albertville (= Kalemie), Hte Kiymbi, 1850 m, N. Leleup, X—1958, Biot. No 44, Humus en forêt, 3 exx. (MAC).

Rwanda

Kisenyi, Rwankuba. VIII—1951, A. E. Bertrand, 2000 m, 2 exx. (MAC); Rugasa (Kisenyi), 2000/2500 m, 17—VIII—1951, A. E. Bertrand, 1 ex. (MAC); Gishwati (Kisenyi), 2000/2500 m, 15—I—1952, A. E. Bertrand, 1 ex. (MAC); Gishwati (route Kisenyi — Kibuye), 2150 m, A. E. Bertrand, 15—I—1952, 2 exx. (MAC); Gishwati, 2000 m, terr. Kisenyi, P. Basilewsky, 13—II—1953, 1 ex. (BMNH); Rwankeri, IV—V—1935, de Witte, Parc Nat. Albert (= Parc Nat. Volcans), 1 ex. (MAC); Birunga, Sabinio, Pr[ins] W[ilhelm] Exp., N. Gyld[enstolpe], 1 ex., type of v. *initialis* Wse. (RMS); Bugoie-Urwald, II—XI.08, v. Stegmann S. V., 1 ex. (MNB); Rutavu, for. du Rugege, 2350 m, P. Basilewsky, 20/23—I—53, 1 ex. (MAC); Kibuye, 1500 m, 12.II—1953, P. Basilewsky, 1 ex. (MAC); Astrida (= Butare) à Bukavu km 90, cascade, 24—XII—1956, G. Marlier, 1 ex. (MAC).

Burundi

Usumbura (Pl. Ruzizi), 1949, Dr. A. Fain, 1 ex. (MAC).

Uganda

Western. Old Camp, E. Ruwenzori, 6—7000 ft, 1906, Coll. by Hon. G. Legge & A. F. R. Wollaston, Type, 1 ex., holotype of *vicina* Gah. (BMNH); Ruwenzori Range, XII.1934—I.1935, B. M. E. Afr. Exp., Namwamba Valley, 6500 ft., F. W. Edwards, 1 ex. (BMNH); Kenya, Mt Elgon (error for Ruwenzori), B. M. E. Afr. Exp., Namwamba Valley, 10200 ft., F. W. Edwards, 1 ex. (BMNH); Ruwenzori Range, XII—1934—I.1935, B. M. E. Afr. Exp., Kilembe, 4.500 ft., F. W. Edwards, 1 ex. (BMNH); N. Ruwenzori, 6000—8500 ft., 1—2.Nov.1911, S. A. Neave, 2 exx. (BMNH); E. Ruwenzori, r. Kamusonge, 2280—2305 m, R. P. M. J. Celis, 25—I—54, Dans terrau de bambous, 1 ex. (MAC); Fort Portal, Dr. Bayer, 1 ex., holotype of v. *ugandensis* Lab. (MAC); Mpanga Forest, Toro, 4800 ft., 13—23.Nov.1911, S. A. Neave, 13 exx. including type of v. *fulvicollis* Lab. and v. *rufa* Lab.

(BMNH); Daro or Durro Forest, Toro, 4000—4500 ft., 25—29.Oct.1911, S. A. Neave, 1 ex. (BMNH); Mafuga Forest, Kegezi, van Someren, VI.—51, 1 ex. (BMNH).

Variation. This species shows an extensive colour variation, and the main varieties have been given names. The form in which both the pronotum and the elytra are red is called var. *rufa,* while that in which the pronotum is black and the elytra red is the typical *vicina.* The form with black pronotum and red elytra with a black lattice pattern was described as *multicolor,* while var. *fulvicollis* was described from specimens with elytra like *multicolor* but with a red pronotum; the elytral pattern in these forms consists of two rather broad transverse bands, one before, the other behind the middle, these bands being connected by the narrowly black suture and side margins, and normally also by a longitudinal black band near the side of the elytron (fig. 21 E); the posterior band is often interrupted (fig. 21 D), the anterior one only exceptionally. That colour form in which the elytra are black with a basal red spot in the male (fig. 21 F) is called v. *mirabilis,* and in that form the pronotum is usually black (I have seen only one specimen with a red pronotum). Some individual aberrations also occur; of such specimens I have seen three typical *vicina* with indistinct brownish spots on the elytra, and one specimen in which these spots are distinct and black (fig. 21 B). The ab. *initialis* is probably also an individual variety, its elytra are more brownish than reddish, with transverse bands that fade out near the suture (fig. 21 C).

The colour forms occur in widely different proportions. In the material studied the following percentages were found:

v. *rufa*	1 %	v. *multicolor*	57 %
typical *vicina*	13 %	v. *mirabilis*	3 %
v. *fulvicollis*	26 %		

No significant geographical variation could be detected. The var. *ugandensis* Lab., which must be considered a proposed subspecies, as it was described with a distinct geographic location, is in coloration a var. *multicolor.* However, even if a difference were found between the populations of Uganda and Zaire, the name *ugandensis* would still be sunk in synonymy, since Uganda is the type locality of the species itself.

The size statistics for the most frequent forms are given in table 9. The differences in size between the colour forms are not significant.

TABLE 9. Size variation in *P. vicina* colour forms.

			length		breadth	
		n	$\bar{x}$	s	$\bar{x}$	s
♂♂	typical *vicina*	13	80.3	4.1	51.6	3.4
	v. *multicolor*	30	81.1	6.0	51.5	4.9
	v. *fulvicollis*	22	80.9	5.7	51.3	4.7
♀♀	typical *vicina*	10	84.6	4.5	54.2	4.1
	v. *multicolor*	30	83.7	6.1	54.5	4.7
	v. *fulvicollis*	16	84.1	5.5	54.8	4.9

DISCUSSION

The genus *Prosmidia,* as understood here, is characterized above all by secondary sexual characters, the pronotum and the basal area of the elytra being modified in the male. In this it agrees with the genus *Neolaetana* Lab., which will be treated in a subsequent paper. Furthermore, the structure of the male genitalia is characteristic. The genus falls naturally into two groups, one containing the subgenus *Prosmidia* s.str., the other the subgenera *Idacanthia* subgen.nov. and *Paracanthina* Hincks. The latter subgenus, which is monotypic, still stands so far apart from the species included in *Idacanthina* that I consider the separation of these subgenera appropriate. All three subgenera seem to be monophyletic.

Within the subgenus *Idacanthina* four monotypic and two undoubtedly monophyletic species groups have been recognized. Of these, I consider that the *dregei, suahelorum* and *excavata* groups form a further unit, with *suahelorum* having an intermediate position, and probably exhibiting a pronotal structure close to the ancestral form. Whether the three Ethiopian species groups also form one unit, or are all independently equal to the above-mentioned unit of three groups is a question that for the time being I prefer to leave unanswered. Further information on the species known, and possibly the discovery of new, related species will be needed before a definitive answer can be given.

The genus is predominantly distributed in eastern and southern Africa. Only two species are recorded west of the Congo Basin, and neither in large numbers. Almost nothing is known about the biology of any of the species. The labels of some specimens show that they were collected in forests, and for a number collected from mountains the elevation is given — no specimens being recorded above the forest line. Only in two specimens of *P. dregei hastata* (from MAC) and one specimen of *P. dregei dregei* (from TMP) is the plant mentioned, which in the former case was *Phaseolus,* in the latter *Dicliptera.* For specimens collected subsequently it would be most valuable to have information on the host plant included.

The species described by Weise (1907a) as *Prosmidia maculosa,* and transferred by Laboissière (1940c) to *Paracantha* has both pronotum and elytral base similar in the two sexes, and will accordingly have to be excluded from *Prosmidia.* Its correct position in the system will be studied in a subsequent paper.

Summary

A revision is presented of the genus *Prosmidia,* which is based on a large amount of material, and takes into account both external characters and the male genitalia. The following classification is established.

Prosmidia Weise, 1902 (= *Idacantha* Chapuis 1875, not Fairmaire 1869; *Diacantha* Chapuis 1879, not Chevrolat 1844)

Subgenus *Prosmidia* s.str.

P. conifera (Fairmaire), 1882

P. bispinosa (Fabricius), 1798 (= *fenestrata* Karsch, 1882)

Subgenus *Idacanthina* nov. subg.

P. dregei dregei (Chapuis), 1876 (= *balteata* Péringuey, 1892; *capensis* Weise, 1902; *ornata* Laboissière 1926, new synon.)

P. dregei passeti (Allard), 1888 (= *pygidialis* Fairmaire, 1891; *bennigseni* Weise, 1902)

P. dregei suturalis Jacoby, 1908

P. dregei hastata (Laboissière), 1921

P. sexplagiata (Jacoby), 1894 (= *picea* Allard, 1888, not Fabricius 1781)

P. sacerdos n.sp.

P. decempunctata (Laboissière), 1926

P. suahelorum Weise, 1902

P. excavata (Weise), 1909 (= *nigronotata* Gahan, 1909)

P. chevrolati (Guérin-Méneville), 1849 (= *lacordairei* Chapuis, 1879)

P. zavattarii (Laboissière), 1938

P. semifasciata n.sp.

P. marginata Silfverberg, 1972

P. prasina Silfverberg, 1972

Subgenus *Paracanthina* Hincks, 1949 (= *Paracantha* Laboissière, 1921, not Coquillett, 1899)

P. vicina (Gahan), 1909 (= *multicolor* Weise, 1912; *ugandensis* Laboissière, 1921)

References

Allard, E. 1888: Synopsis des Galerucines à corselet sillonné transversalement. 1re partie. — Ann. Soc. Entomol. France (6)8:305—332.

Bryant, G. E. 1956: Contributions à l'etude de la faune entomologique du Ruanda-Urundi (Mission P. BASILEWSKY 1953). XCVII. Coleoptera Chrysomelidae. Donaciinae, Criocerinae, Megalopodinae, Clytrinae, Cryptocephalinae (part.), Eumolpinae and Galerucinae. — Ann. Mus. Congo, Zool., 51:395—412.

—»— 1958: Galerucinae (Coleoptera Chrysomelidae). — Explor. Parc National Upemba. Miss. de Witte. 49:41—65.

—»— 1959: Coleoptera: Chrysomelidae I. — South African Animal Life 6: 194—226.

—»— 1960: Mission zoologique de l'I.R.S.A.C. en Afrique orientale (P. Basilewsky et N. Leleup, 1957) XXI. Coleoptera Chrysomelidae. — Ann. Mus. Congo, Zool., 81:342—368.

Chapuis, F. 1875: Lacordaire et Chapuis, Histoire Naturelle des Insectes, Genera des Coléoptères. Tome XI. — Paris, 420 pp.

—»— 1876: Lacordaire et Chapuis, Histoire Naturelle des Insectes, Genera des Coléoptères. Atlas, Pl. 111—134.

CHAPUIS, F. 1879: Phytophages Abyssiniens du Musèe Civique d'histoire naturelle de Gênes. — Ann. Mus. Civ. Stor. Nat. Genova 15:5—31.
COQUEBERT, A. J. 1804: Illustratio Iconographica Insectorum, que in Musaeis parisinis observavit et in lucem edidit Joh. Christ. Fabricius, praemissis ejusdem descriptionibus. Tabulorum decas tertia. — Parisis anno XII. 91—142.
DEJEAN, P. F. M. A. 1837: Catalogue des Coléoptères de la collection de M. le Comte Dejean. III edit. — 503 pp. Paris.
FABRICIUS, J. C. 1798: Supplementum Entomologiae Systematicae. — 572 pp. Hafniae.
—»— 1799: Index alphabeticus in J. C. Fabricii Supplementum Entomologiae Systematicae, ordines, genera et species continens. — 53 pp. Hafniae.
—»— 1801: Systema Eleutheratorum secundum ordines, genera, species; adjectis synonymis, locis, observationibus, descriptionibus. Tomus I. — 506 pp. Kiliae.
FAIRMAIRE, L. 1882: (Récoltes entomologiques de M. A. Burdo, sur le trajet de Zanzibar aux grands lacs.) — Ann. Soc. Entomol. Belgique 26, C.r. 43—58.
—»— 1891: Coléoptères de l'Afrique orientale. — C. R. Soc. Entomol. Belgique 1891:279—307.
FERREIRA, M. C. 1963: Catálogo dos Coleópteros de Moçambique. Part 1. — Rev. Entomol. Moçambique 6:1—532.
—»— 1967: Catálogo dos Coleópteros de Angola. — Rev. Entomol. Moçambique 8:415—1317.
GAHAN, C. J. 1893: On a collection of Coleoptera sent by Mr. H. H. Johnston, C. B., from British Central Africa. — Proc. Zool. Soc. London 1893:739—748.
—»— 1909: Zoological results of the Ruwenzori Expedition, 1905—1906. 14. Coleoptera. Part III. — Trans. Zool. Soc. London 19:202—226.
GUÉRIN-MÉNEVILLE, F. E. 1849: Voyage en Abyssinie de M. Théoph. Lefebvre. Insectes VI:239—390. — Paris.
HAROLD, E.v. 1879: Bericht über die von den Herren A. v. Homeyer und P. Pogge in Angola und im Lunda-Reiche gesammelten Coleopteren. — Coleopterol. Hefte 16:1—224.
HINCKS, W. D. 1949: Some Nomenclatorial Notes on Chrysomelidae (Col.). No. 1, Galerucinae. — Ann. Mag. Nat. Hist. (12) 2:607—622.
JACOBY, M. 1891: On some new species of Phytophagous Coleoptera from various regions. — Entomologist, Suppl. 35—41.
—»— 1894: Descriptions of some new genera and species of Phytophagous Coleoptera contained in the collections of the Brussels Museum and my own. — Ann. Soc. Entomol. Belgique 38:184—198.
—»— 1898: List of the Phytophagous Coleoptera obtained by Mr. W. L. Distant in the Transvaal, with descriptions of the new species. — Ann. Mag. Nat. Hist. (7) 1:344—360.
—»— 1903: A further contribution to our knowledge of African Phytophagous Coleoptera, Part II. — Trans. Entomol. Soc. London 1903:1—38.
—»— 1908: Voyage de M. Maurice de Rothschild en Éthiopie et dans l'Afrique orientale (1904—1906), espèces nouvelles de Chrysomelidae. — Ann. Soc. Entomol. France 76:515—525.
—»— 1922: Chrysomélides. — Voyage de M. le Baron Maurice de Rothschild en Éthiopie et en Afrique orientale anglaise (1904—1905). Resultats Scientifiques. Animals Articules II:764—781.
KARSCH, F. 1882: Verzeichniss der von Herrn Stabsarzt Dr. Falkenstein in Westafrika (Chinchoxo) gesammelten Chrysomeliden, Endomychiden, Coccinelliden und Anthotribiden. — Berliner Entomol. Zeitschr. 26:395—403.
LABOISSIÈRE, V. 1921: Étude des Galerucini de la Collection du Musée du Congo belge. Première partie. — Rev. Zool. Africaine 9:33—86.
—»— 1923: Descriptions de deux espèces et trois variétés nouvelles de Galerucini africains de la collection du British Museum. — Bull. Soc. Entomol. France 1923:206—208.
—»— 1924: Voyage dans l'Afrique Orientale Anglaise 1912—1915 par Guy Babault. Chrysomelidae: Galerucinae. — 38 pp. Paris.
—»— 1925a: Supplément au Catalogus Coleopterorum, Pars 78 (Galerucinae), de J. Weise, précédé de remarques sur la classification des Galerucini. — Encyclopedie Entomol. Ser.B (1) 1:33—62.

Laboissière, V. 1925b: Coléoptères — Chrysomelidae — Tribu: Galerucini. — Miss. Rohan-Chabot, Angola & Rhodesia (1912—1914) 4(3):93—113.
—»— 1926: Description d'un nouveau genre et de trois nouvelles espèces de Galerucini africains. — Bull. Soc. Entomol. France 1926: 190—193.
—»— 1929a: Galerucini africains de la collection du Musée Civique de Gênes. Première note. — Ann. Mus. Civ. Stor. Nat. Genova 53:319—353.
—»— 1929b: Voyage au Congo de S.A.R. le Prince Léopold de Belgique (1925). Coleoptera. — 18. Chrysomelidae. 1. — Galerucini. — Rev. Zool. Bot. Africaine 17:137—153.
—»— 1931: Contributions à l'étude de la faune du Mozambique. Voyage de M. P. Lesne (1928—1929). 4e Note — Coléoptères, Galerucini. — Mem. Estudos Mus. Zool. Univ. Coimbra (1) 48, 55 pp.
—»— 1938: Coleotteri raccolti nei Borana (A.O.I.) dal Prof. E. Zavattari (1937). Chrysomelidae: Galerucinae. — Atti Mus. Civ. Stor. Nat. Trieste 14:139—148.
—»— 1940a: Galerucinae (Coleoptera Phytophaga) Fam. Chrysomelidae. — Explor. Parc National Albert, Miss. de Witte (1933—1935). Fasc. 31. 93 pp.
—»— 1940b: Observations sur les Galerucinae de la collection du Musée du Congo et descriptions d'especes nouvelles. — Rev. Zool.Bot. Africaine 33:295—312.
—»— 1940c: Observations sur les Galerucinae des collections du Musée Royal d'Histoire Naturelle de Belgique et descriptions de nouveaux genres et espèces. — Bull. Mus. R. Hist. Nat. Belgique XVI, 25, 16 pp.
Lemche, H. 1971: Comment on the request to revise the code so as to permit emendations of certain *-ii* endings of patronyms. — Bull. Zool. Nomencl. 28:140.
Olivier, A. G. 1808: Entomologie, ou Histoire Naturelle des Insectes, avec leurs caractères génériques et spécifiques, leur description, leur synonymie et leur figure enluminée. Coléoptères. Tome sixième. Genres 93—100, pp. 613—1104. — Paris.
D'Orbigny, C. 1844: Dictionnaire Universel d'Histoire Naturelle. Tome IV. — 752 pp. Paris.
Péringuey, L. 1892a: Third contribution to the South African Coleopterous Fauna. On beetles collected in tropical South-Western Africa by Mr. A. W. Eriksson. — Trans. S. Afr. Philosoph. Soc. VI (2):1—94.
—»— 1892b: Fourth contribution to the South African Coleopterous Fauna. Description of new Coleoptera in the South African Museum. — Trans. S. Afr. Philosoph. Soc. VI (2):95—136.
Smith, H. M., Stuart, L. C. & Conant, R. 1971: Request for revision of the 1964 code to permit valid emendations of certain *-ii* endings of patronyms. — Bull. Zool. Nomencl. 27:250—252.
Silfverberg, H. 1972: Aulacophorina from North-East Africa (Coleoptera, Chrysomelidae). — Notulae Entomol. 52:41—46.
Weise, J. 1902: Beitrag zur Kenntniss der afrikanischen Galerucinen. — Deutsche Entomol. Zeitschr. 1901:273—300.
—»— 1903: Afrikanische Galerucinen. — Deutsche Entomol. Zeitschr. 1903:35—56.
—»— 1904: Über bekannte und neue Chrysomeliden. — Arch. Naturgesch. 70 (1):157 — 178.
—»— 1907a: Neue Chrysomeliden und Coccinelliden von der Ausbeute der Herren Oskar Neumann und Baron von Erlanger in Abyssinien. — Arch. Naturgesch. 73 (1):210—232.
—»— 1907b: Afrikanische Chrysomeliden. — Ann. Soc. Entomol. Belgique 51:128—140.
—»— 1909: Chrysomelidae und Coccinellidae. — Wissenschaftliche Ergebnisse der schwedischen zoologischen Expedition nach dem Kilimandjaro, dem Meru und den umgebenden Massaisteppen Deutsch-Ostafrikas 1905—1906 unter Leitung von Prof. Dr. Yngve Sjöstedt. I, 7:153—266.
—»— 1910: Chrysomeliden und Coccinelliden. — Verh. Naturf. Ver. Brünn 48:25—53.
—»— 1912: Chrysomelidae. — Wiss. Ergebn. Deutschen Zentr. Afr. Exped. IV (7):127—163.
—»— 1914: Coleoptera I. Chrysomelidae und Coccinellidae. — Beitr. Kenntnis Land- und Süsswasserfauna Deutsch-Südwestafrikas. Ergebn. Hamburger deutsch-südwestafrikanischen Studienreise 1911, 251—275.
—»— 1915: Chrysomelidae und Coccinellidae. — Ergebn. 2. deutschen Zentr. Afr. Exped. I:155—184.

WEISE, J. 1924a: Chrysomelidae: 13. Galerucinae. — Coleopterorum Catalogus 78, 225 pp.
—»— 1924b: Zoological results of the Swedish Expedition to Central Africa 1921. Insecta 7. Chrysomelidae und Coccinellidae. — Ark. Zool. 16, 22, 30 pp.
—»— 1927: Über bekannte und neue Chrysomeliden und Coccinelliden aus dem Reichsmuseum zu Stockholm. — Ark. Zool. 18 A, 34, 34 pp.
WILCOX, J. A. 1972: Chrysomelidae: Galerucinae. Luperini: Aulacaphorina, Diabroticina. — Coleopterorum Catalogus Supplementa 78 (Ed. Sec.):221—431.
ZIMSEN, E. 1964: The type material of I. C. Fabricius. — 656 pp. Copenhagen.

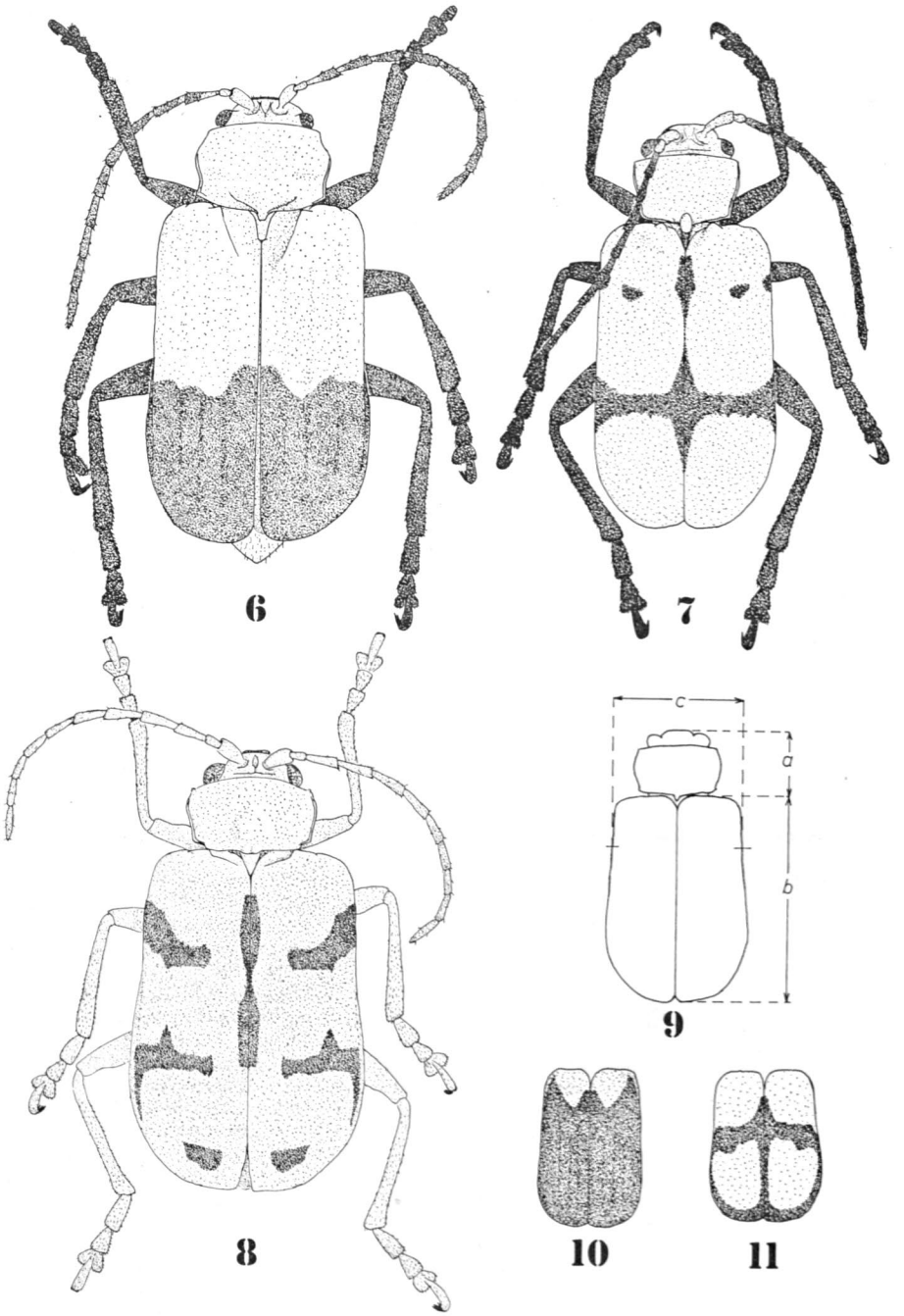

FIG. 6—11. *Prosmidia conifera* (6), *P. sacerdos* (7), *P. semifasciata* (8), diagram of measurements (9), darkened Namibian variety of *P. conifera* (10) and coloration of *P.bispinosa* (11).

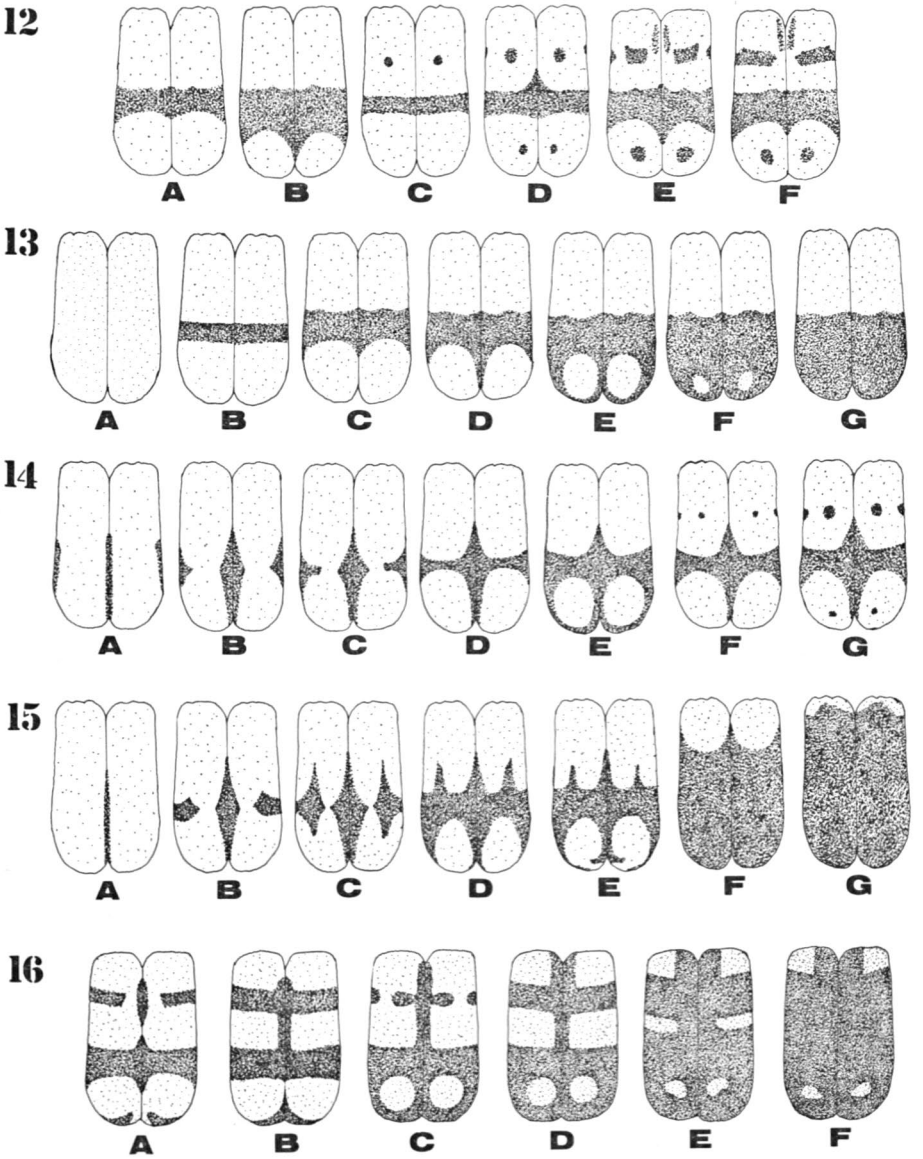

FIG. 12—16. Colour variation in *Prosmidia dregei dregei* (12), *P. d. passeti* (13), *P. d. suturalis* (14), *P. d. hastata* (15) and *P. sexplagiata* (16).

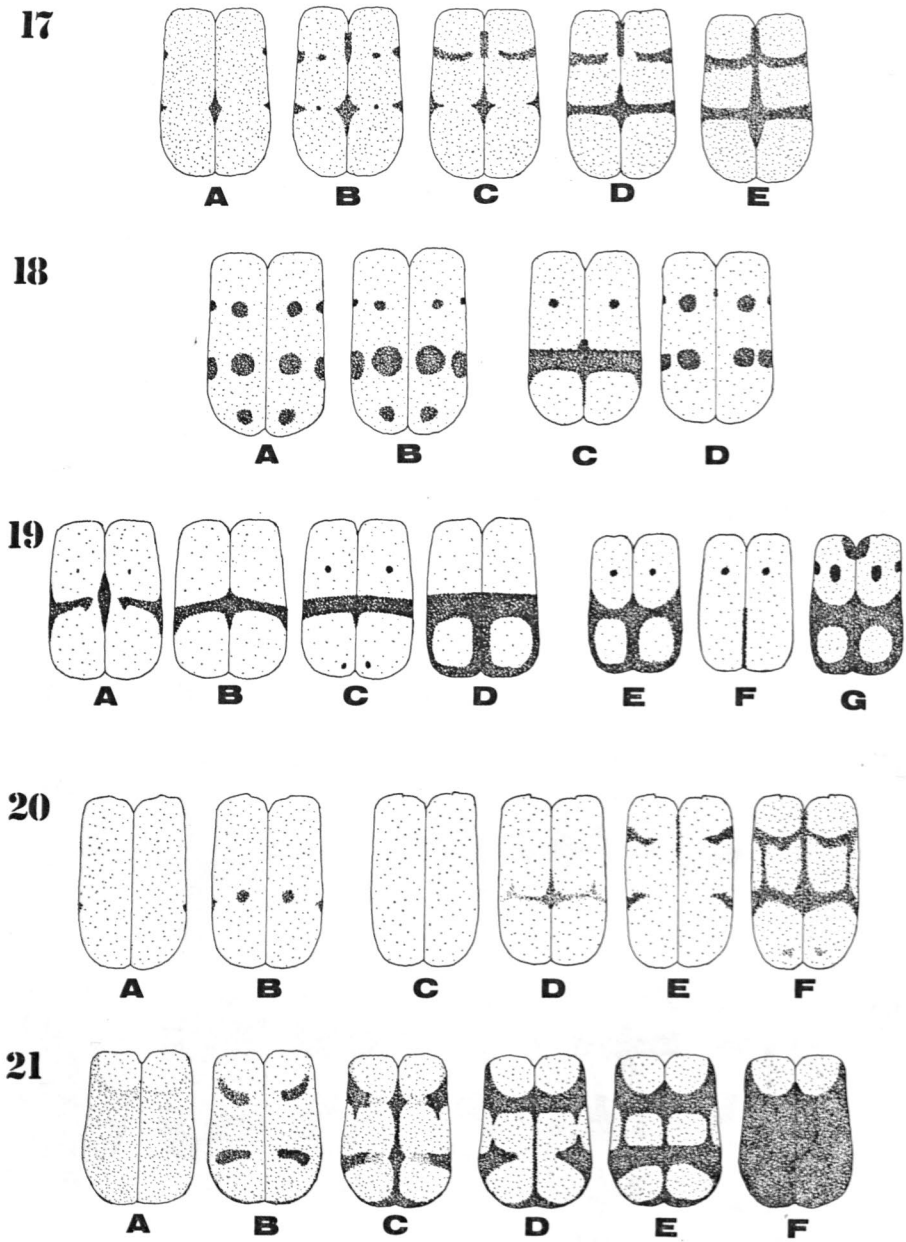

FIG. 17—21. Colour variation in *Prosmidia sacerdos* (17), *P. decemmaculata* (18 A—B), *P.* sp. — grande grot Lubudi — (18 C—D), *P. suahelorum* (19 A—D), *P. excavata* (19 E—G), *P. chevrolati* (20 A—B), *P. zavattarii* (20 C—F), and *P. vicina* (21).

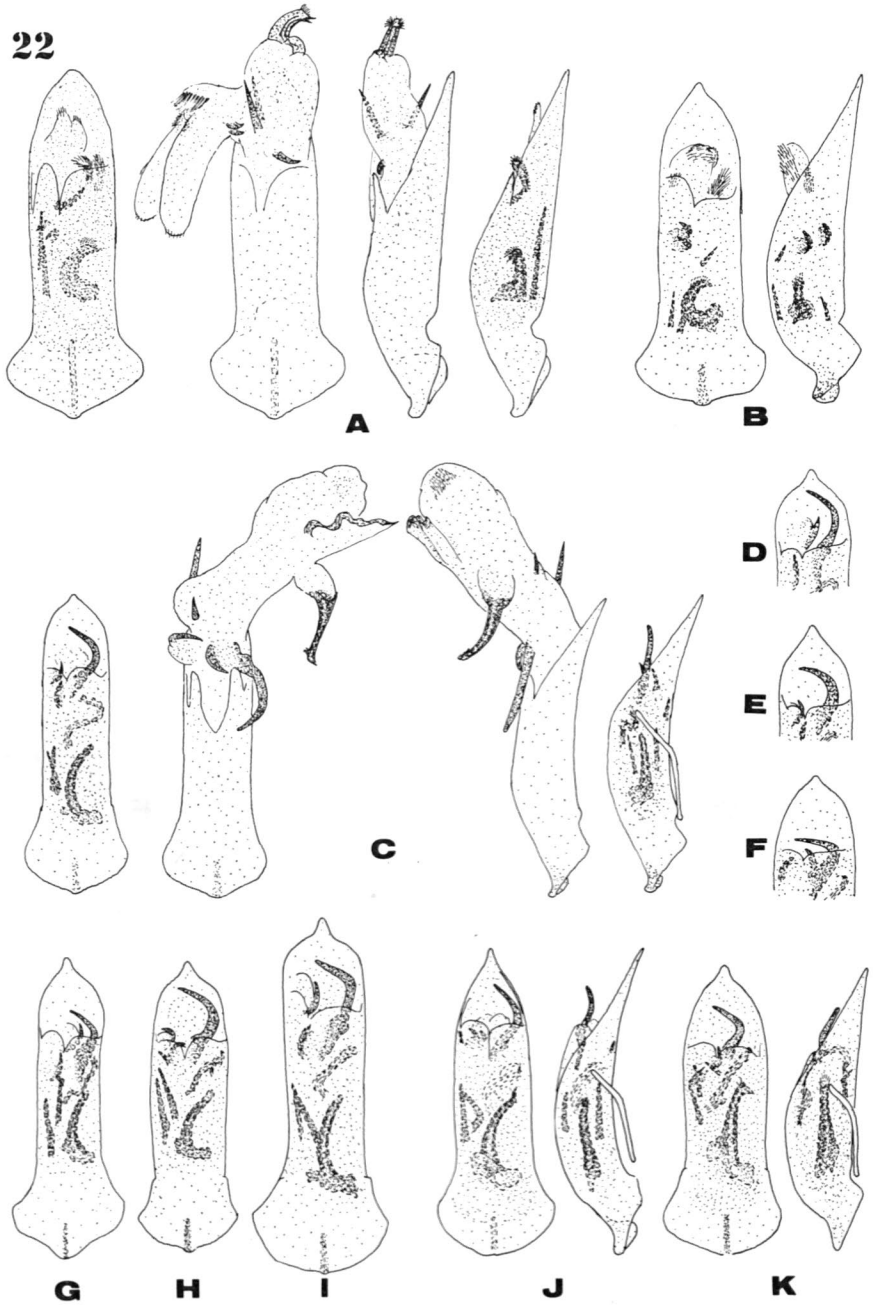

FIG. 22. Male genitalia of *Prosmidia conifera* (A), *P. bispinosa* (B), *P. dregei passeti* (C), *P. d. dregei* (D), *P. d. suturalis* (E), *P. d. hastata* (F), *P. sexplagiata* (G), *P. sacerdos* (H), *P. decemmaculata* (I), *P. suahelorum* (J) and *P. excavata* (K).

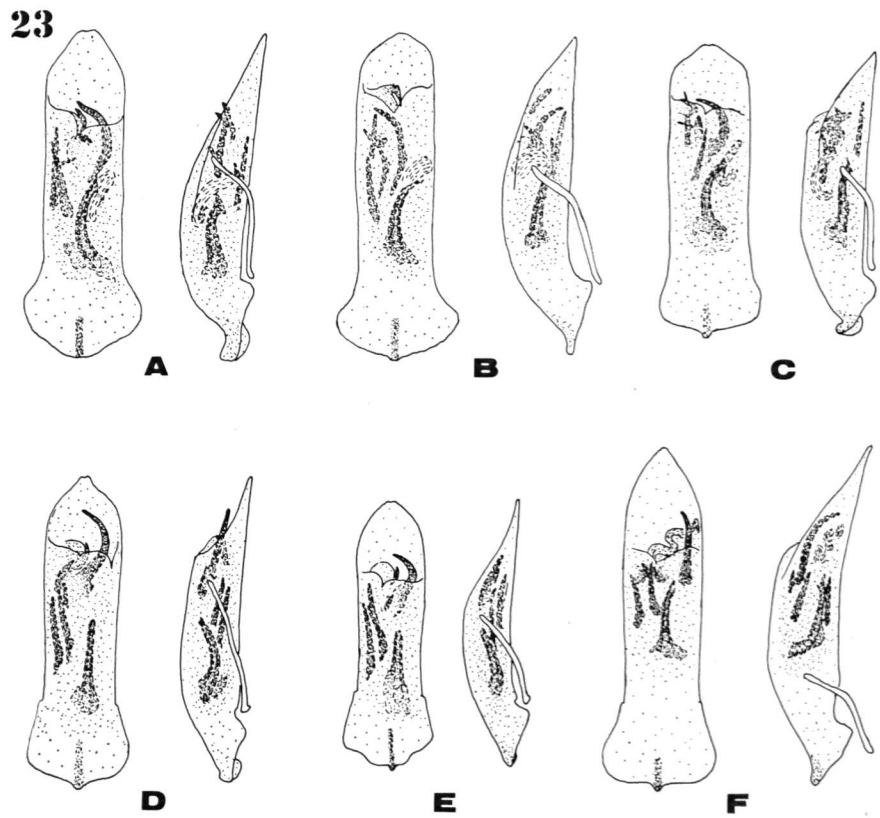

FIG. 23. Male genitalia of *Prosmidia chevrolati* (A), *P. zavattarii* (B), *P. semifasciata* (C), *P. marginata* (D), *P. prasina* (E) and *P. vicina* (F).

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